



COMMONWEALTH of VIRGINIA

DEPARTMENT OF ENVIRONMENTAL QUALITY

Permit No. VA0004090

Effective Date: March 1, 2016

Expiration Date: February 28, 2021

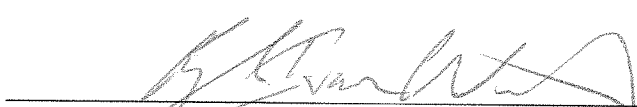
AUTHORIZATION TO DISCHARGE UNDER THE VIRGINIA POLLUTANT DISCHARGE ELIMINATION SYSTEM AND THE VIRGINIA STATE WATER CONTROL LAW

In compliance with the provisions of the Clean Water Act as amended and pursuant to the State Water Control Law and regulations adopted pursuant thereto, the following owner is authorized to discharge in accordance with the information submitted with the permit application, and with this permit cover page, Part I and Part II, as set forth herein.

Owner: Dominion Virginia Electric and Power Company
Facility Name: Surry Power Station & Gravel Neck
County: Surry
Facility Location: 5570 Hog Island Road, Surry VA 23883

The owner is authorized to discharge to the following receiving stream(s):

	Process Discharges	Stormwater				
	Outfall 001	Outfall 002	Outfall 050	Outfall 051	Outfall 052	Outfall 053
Stream Name:	James River	Unnamed Tributary to James River	Unnamed Tributary to James River	Unnamed Tributary to Hog Island Creek	James River	James River
Basin:	James River (Lower)	James River (Lower)	James River (Lower)	James River (Lower)	James River (Lower)	James River (Lower)
Subbasin:	NA	NA	NA	N/A	NA	NA
Section:	1	1a	1a	1	1	1
Class:	II	III	III	III	II	II
Special Standards:	a, bb	None	None	None	a, bb	a, bb


Deputy Regional Director, Department of Environmental Quality

26 FEBRUARY 2016
Date

A. LIMITATIONS AND MONITORING REQUIREMENTS

1. During the period beginning with the permit's effective date and lasting until the permit's expiration date, the permittee is authorized to discharge from Outfall 001 – Units 1 and 2 condenser cooling water and internal discharge Outfalls 101 through 122. This discharge shall be limited and monitored at Outfall 001 as specified below:

EFFLUENT CHARACTERISTICS	DISCHARGE LIMITATIONS				MONITORING REQUIREMENTS	
	MONTHLY AVERAGE	WEEKLY AVERAGE	MINIMUM	MAXIMUM	FREQUENCY ^(a)	SAMPLE TYPE
Flow (MGD)	NL	NA	NA	NL	Continuous	Recorded ^(b)
pH (Standard Units) ^(c)	NA	NA	6.0	9.0	2 per Month	Grab
Total Residual Chlorine (mg/L) ^{(d)(e)}	0.0080	NA	NA	0.016	1 per Day	Grab
Heat Rejected (BTU/HR)	Heat rejected shall not exceed a daily maximum of 12.6×10^9				Continuous	Recorded
Intake pH (Standard Units) ^(f)	NA	NA	NL	NL	2 per Month	Grab
Intake Total Suspended Solids (TSS) (mg/L) ^(f)	NL	NA	NA	NL	1 per 6 Months	Grab
Thallium, Total (µg/L)	NL	NA	NA	NL	1 per Year	Grab

"NA" means not applicable.

"NL" means no limitation is established. Monitoring and reporting, however, are required.

- (a) Monitoring frequency periods encompassing multiple months shall be in accordance with I.C.23 of this permit.
- (b) A continuous record of cooling water pump operation satisfies this requirement.
- (c) Should the pH of Outfall 001 fall outside the minimum or maximum limitation, the discharge will be considered to be in compliance with the permit if it is within ± 0.5 pH units of the pH measured concurrently in the intake.
- (d) See Part I.C.6 for compliance reporting.
- (e) If chlorine is purposely introduced to the cooling water or to contributing waste streams, Total Residual Chlorine effluent samples shall be taken during the period in which the resulting residual chlorine is discharged through Outfall 001.
- (f) Intake samples for Total Suspended Solids (TSS) and pH shall be collected at the high-level intake screens. Sampling for TSS at the intake shall coincide with the TSS effluent samples taken at Outfalls 102, 103, 106, 116, and 117.

A. LIMITATIONS AND MONITORING REQUIREMENTS

2. During the period beginning with the permit's effective date and lasting until the permit's expiration date, the permittee is authorized to discharge from internal discharge outfall serial number 101 –Sewage Treatment Plant. This discharge shall be limited and monitored at internal Outfall 101 as specified below:

EFFLUENT CHARACTERISTICS	DISCHARGE LIMITATIONS				MONITORING REQUIREMENTS	
	MONTHLY AVERAGE	WEEKLY AVERAGE	MINIMUM	MAXIMUM	FREQUENCY	SAMPLE TYPE
Flow (MGD) ^(a)	NL	NA	NA	NL	Continuous	Recorded
pH (Standard Units)	NA	NA	6.0	9.0	1 per Day	Grab
Biochemical Oxygen Demand (BOD ₅) (mg/L) ^(b)	30 ^(c)	NA	NA	45	1 per 2 Months ^(d)	4 HC
TSS (mg/L)	30 ^(c)	NA	NA	45	1 per 6 Months ^(d)	4 HC
Enterococci (n/100 mL) ^{(e)(f)}	35 geometric mean	NA	NA	NA	4 Days per Month (between 10 a.m. and 4 p.m.) once per year	Grab
Fecal coliform (n/100 mL) ^{(e)(f)}	200 geometric mean	NA	NA	NA	4 Days per Month (between 10 a.m. and 4 p.m.) once per year	Grab
Total Phosphorous (TP) (mg/L)	NL	NA	NA	NL	1 per Year	Grab
Total Kjeldahl Nitrogen (TKN) (mg/L)	NL	NA	NA	NL	1 per Year	Grab
Nitrite + Nitrate (mg/L)	NL	NA	NA	NL	1 per Year	Grab
Total Nitrogen (TN) (mg/L)	NL	NA	NA	NL	1 per Year	Calculated ^(g)

"NA" means not applicable.

"NL" means no limitation is established. Monitoring and reporting, however, are required.

(a) The design flow of this treatment facility is 0.085 MGD. See Part I.C.18 for additional flow requirements.

(b) See Part I.C.7 for additional instructions regarding effluent monitoring frequencies.

(c) These limitations are expressed in two significant figures.

(d) Monitoring frequency periods encompassing multiple months shall be in accordance with I.C.23 of this permit.

- (e) See Part I.B. for additional Total Residual Chlorine and bacterial monitoring requirements.
 - (f) "4 Days per Month" means four samples collected at least 7 days apart during the same calendar month. The "once per year" modifier means that samples only need to be collected during one calendar month of the year.
 - (g) Total Nitrogen, which is the sum of the TKN and Nitrite + Nitrate, shall be derived from the results of those tests.
3. At least 85% removal for BOD₅ and TSS must be attained for effluent discharged through Outfall 101.

A. LIMITATIONS AND MONITORING REQUIREMENTS

4. During the period beginning with the permit's effective date and lasting until the permit's expiration date, the permittee is authorized to discharge from the following internal discharge outfalls:

Outfall serial number 102 – Turbine Sump A
 Outfall serial number 103 – Turbine Sump B
 Outfall serial number 106 – Turbine Sump C

These discharges shall be limited and monitored at the above internal outfall locations as specified below:

EFFLUENT CHARACTERISTICS	DISCHARGE LIMITATIONS				MONITORING REQUIREMENTS	
	MONTHLY AVERAGE	WEEKLY AVERAGE	MINIMUM	MAXIMUM	FREQUENCY ^{(a)(b)}	SAMPLE TYPE
Flow (MGD)	NL	NA	NA	NL	1 per 6 Months	Estimate
pH (Standard Units)	NA	NA	NL	NL	1 per 6 Months	Grab
TSS – Net Increase (mg/L) ^{(c)(d)}	30 ^(e)	NA	NA	100 ^(e)	1 per 6 Months	Grab
Oil and Grease (mg/L) ^(d)	15 ^(e)	NA	NA	20 ^(e)	1 per 6 Months	Grab
TP (mg/L)	NL	NA	NA	NL	1 per Year	Grab
TKN (mg/L)	NL	NA	NA	NL	1 per Year	Grab
Nitrite + Nitrate (mg/L)	NL	NA	NA	NL	1 per Year	Grab
TN (mg/L)	NL	NA	NA	NL	1 per Year	Calculated ^(f)

"NA" means not applicable.

"NL" means no limitation is established. Monitoring and reporting, however, are required.

- (a) See Part I.C.7 for additional instructions regarding effluent monitoring frequencies.
 (b) Monitoring frequency periods encompassing multiple months shall be in accordance with I.C.23 of this permit.
 (c) "Net Increase" is defined as the effluent TSS concentration from internal Outfalls 102, 103, and 106, minus the intake TSS concentration associated with Outfall 001.
 (d) See Part I.C.6 for compliance reporting.
 (e) These limitations are expressed in two significant figures.
 (f) Total Nitrogen, which is the sum of the TKN and Nitrite + Nitrate, shall be derived from the results of those tests.

A. LIMITATIONS AND MONITORING REQUIREMENTS

5. During the period beginning with the permit's effective date and lasting until the permit's expiration date, the permittee is authorized to discharge from the following internal discharge outfalls:

Outfall serial number 104 – Station Reverse Osmosis Reject and Backwash
 Outfall serial number 107 – Package Boilers A and B
 Outfall serial number 109 – Radwaste Facility
 Outfall serial number 110 – Unit 1A Waste Neutralization Sump
 Outfall serial number 111 – Unit 1B Waste Neutralization Sump
 Outfall serial number 112 – Unit 2A Waste Neutralization Sump
 Outfall serial number 113 – Unit 2B Waste Neutralization Sump
 Outfall serial number 114 – Unit 1 Steam Generator Blowdown
 Outfall serial number 115 – Unit 2 Steam Generator Blowdown
 Outfall serial number 118 – Unit 1 Condenser Hotwell Drain
 Outfall serial number 119 – Unit 2 Condenser Hotwell Drain
 Outfall serial number 120 – Low Conductivity Sump
 Outfall serial number 121 – Unit 1 Steam Generator Hydrolance
 Outfall serial number 122 – Unit 2 Steam Generator Hydrolance

These discharges shall be limited and monitored at the above internal outfall locations as specified below:

EFFLUENT CHARACTERISTICS	DISCHARGE LIMITATIONS				MONITORING REQUIREMENTS	
	MONTHLY AVERAGE	WEEKLY AVERAGE	MINIMUM	MAXIMUM	FREQUENCY ^{(a)(b)}	SAMPLE TYPE
Flow (MGD)	NL	NA	NA	NL	1 per 6 Months	Estimate
pH (Standard Units)	NA	NA	NL	NL	1 per 6 Months	Grab
TSS (mg/L) ^(d)	30 ^(c)	NA	NA	100 ^(c)	1 per 6 Months	Grab
Oil and Grease (mg/L) ^(d)	15 ^(c)	NA	NA	20 ^(c)	1 per 6 Months	Grab
TP (mg/L)	NL	NA	NA	NL	1 per Year	Grab
TKN (mg/L)	NL	NA	NA	NL	1 per Year	Grab
Nitrite + Nitrate (mg/L)	NL	NA	NA	NL	1 per Year	Grab
TN (mg/L)	NL	NA	NA	NL	1 per Year	Calculated ^(e)

"NA" means not applicable.

"NL" means no limitation is established. Monitoring and reporting, however, are required.

- (a) See Part I.C.7 for additional instructions regarding effluent monitoring frequencies.
- (b) Monitoring frequency periods encompassing multiple months shall be in accordance with I.C.23 of this permit.
- (c) These limitations are expressed in two significant figures.
- (d) See Part I.C.6 for compliance reporting.
- (e) Total Nitrogen, which is the sum of the TKN and Nitrite + Nitrate, shall be derived from the results of those tests.

A. LIMITATIONS AND MONITORING REQUIREMENTS

6. During the period beginning with the permit's effective date and lasting until the permit's expiration date, the permittee is authorized to discharge from internal discharge outfall serial number 105 – Station Oil Storage Tank Dike. This discharge shall be limited and monitored at internal Outfall 105 as specified below:

EFFLUENT CHARACTERISTICS	DISCHARGE LIMITATIONS				MONITORING REQUIREMENTS ^(a)	
	MONTHLY AVERAGE	WEEKLY AVERAGE	MINIMUM	MAXIMUM	FREQUENCY ^(b)	SAMPLE TYPE
Flow (MGD)	NL	NA	NA	NL	1 per 6 Months	Estimate
pH (Standard Units)	NA	NA	NL	NL	1 per 6 Months	Grab
TSS (mg/L)	30 ^(c)	NA	NA	100 ^(c)	1 per 6 Months	Grab
Total Petroleum Hydrocarbons (TPH) (mg/L) ^{(d)(e)}	NL	NA	NA	NA	1 per 6 Months	Grab
Oil and Grease (mg/L) ^(e)	15 ^(c)	NA	NA	20 ^(c)	1 per 6 Months	Grab
TP (mg/L)	NL	NA	NA	NL	1 per Year	Grab
TKN (mg/L)	NL	NA	NA	NL	1 per Year	Grab
Nitrite + Nitrate (mg/L)	NL	NA	NA	NL	1 per Year	Grab
TN (mg/L)	NL	NA	NA	NL	1 per Year	Calculated ^(f)

"NA" means not applicable.

"NL" means no limitation is established. Monitoring and reporting, however, are required.

- (a) A sample shall be taken at the required frequency during each monitoring period that a discharge occurs. For months in which no discharge occurs, the permittee shall continue to submit the required monthly DMR with the statement "No Discharge" indicated within the reporting sheet.
- (b) Monitoring frequency periods encompassing multiple months shall be in accordance with I.C.23 of this permit.
- (c) These limitations are expressed in two significant figures.
- (d) TPH is the sum of individual gasoline range organics and diesel range organics or TPH-GRO and TPH-DRO to be measured by EPA SW 846 Method 8015C (2000) or EPA SW 846 Method 8015C (2007) for gasoline and diesel range organics, or by EPA SW 846 Methods 8260B (1996) and 8270D (2007).
- (e) See Part I.C.6 for compliance reporting.
- (f) Total Nitrogen, which is the sum of the TKN and Nitrite + Nitrate, shall be derived from the results of those tests.

7. There shall be no discharge of tank bottom waters from Outfall 105.

A. LIMITATIONS AND MONITORING REQUIREMENTS

8. During the period beginning with the permit's effective date and lasting until the permit's expiration date, the permittee is authorized to discharge from internal discharge outfall serial number 108 – Settling Pond. This discharge shall be limited and monitored at internal Outfall 108 as specified below:

EFFLUENT CHARACTERISTICS	DISCHARGE LIMITATIONS				MONITORING REQUIREMENTS ^(a)	
	MONTHLY AVERAGE	WEEKLY AVERAGE	MINIMUM	MAXIMUM	FREQUENCY ^(b)	SAMPLE TYPE
Flow (MGD)	NL	NA	NA	NL	1 per 3 Months	Measured
pH (Standard Units)	NA	NA	NL	NL	1 per 3 Months	Grab
TSS (mg/L) ^(c)	30 ^(d)	NA	NA	100 ^(d)	1 per 3 Months	Grab
Total Organic Carbon (mg/L)	NA	NA	NA	110 ^(d)	1 per 6 Months	Grab
TPH (mg/L) ^{(c) (e)}	NL	NA	NA	NA	1 per Year	Grab
Oil and Grease (mg/L) ^(c)	15 ^(d)	NA	NA	20 ^(d)	1 per 3 Months	Grab
TP (mg/L)	NL	NA	NA	NL	1 per Year	Grab
TKN (mg/L)	NL	NA	NA	NL	1 per Year	Grab
Nitrite + Nitrate (mg/L)	NL	NA	NA	NL	1 per Year	Grab
TN (mg/L)	NL	NA	NA	NL	1 per Year	Calculated ^(f)

"NA" means not applicable.

"NL" means no limitation is established. Monitoring and reporting, however, are required.

- (a) A sample shall be taken at the required frequency during each monitoring period that a discharge occurs. For months in which no discharge occurs, the permittee shall continue to submit the required monthly DMR with the statement "No Discharge" indicated within the reporting sheet.
- (b) See Part I.C.7 for additional instructions regarding effluent monitoring frequencies.
- (c) See Part I.C.6 for compliance reporting.
- (d) These limitations are expressed in two significant figures.
- (e) TPH is the sum of individual gasoline range organics and diesel range organics or TPH-GRO and TPH-DRO to be measured by EPA SW 846 Method 8015C (2000) or EPA SW 846 Method 8015C (2007) for gasoline and diesel range organics, or by EPA SW 846 Methods 8260B (1996) and 8270D (2007).
- (f) Total Nitrogen, which is the sum of the TKN and Nitrite + Nitrate, shall be derived from the results of those tests.

A. LIMITATIONS AND MONITORING REQUIREMENTS

9. During the period beginning with the permit's effective date and lasting until the permit's expiration date, the permittee is authorized to discharge from the following internal discharge outfalls:

Outfall serial number 116 – Unit 1 Recirculation Spray Heat Exchanger

Outfall serial number 117 – Unit 2 Recirculation Spray Heat Exchanger

These discharges shall be limited and monitored at the above internal outfall locations as specified below:

EFFLUENT CHARACTERISTICS	DISCHARGE LIMITATIONS				MONITORING REQUIREMENTS	
	MONTHLY AVERAGE	WEEKLY AVERAGE	MINIMUM	MAXIMUM	FREQUENCY ^{(a)(b)}	SAMPLE TYPE
Flow (MGD)	NL	NA	NA	NL	1 per 6 Months	Estimate
pH (Standard Units)	NA	NA	NL	NL	1 per 6 Months	Grab
TSS – Net Increase (mg/L) ^{(c) (d)}	30 ^(e)	NA	NA	100 ^(e)	1 per 6 Months	Grab
Oil and Grease (mg/L)	15 ^(e)	NA	NA	20 ^(e)	1 per 6 Months	Grab

"NA" means not applicable.

"NL" means no limitation is established. Monitoring and reporting, however, are required.

- (a) See Part I.C.7 for additional instructions regarding effluent monitoring frequencies.
- (b) Monitoring frequency periods encompassing multiple months shall be in accordance with I.C.23 of this permit.
- (c) "Net Increase" is defined as the effluent TSS concentration from internal Outfalls 116 and 117 minus the intake TSS concentration associated with Outfall 001.
- (d) See Part I.C.6 for compliance reporting.
- (e) These limitations are expressed in two significant figures.

A. STORMWATER MONITORING

10. During the period beginning with the permit's effective date and lasting until the permit's expiration date, the permittee is authorized to discharge stormwater from outfall serial number 002 – Gravel Neck Gas Turbine Dike. This discharge shall be limited and monitored at Outfall 002 as specified below:

EFFLUENT CHARACTERISTICS	DISCHARGE LIMITATIONS				MONITORING REQUIREMENTS ^(a)	
	MONTHLY AVERAGE	WEEKLY AVERAGE	MINIMUM	MAXIMUM	FREQUENCY ^(b)	SAMPLE TYPE
Flow (MGD)	NL	NA	NA	NL	1 per 6 Months	Estimate
Copper, Dissolved (µg/L) ^(c)	NL	NA	NA	NL	1 per 6 Months	Grab
Zinc, Dissolved (µg/L) ^(c)	NL	NA	NA	NL	1 per 6 Months	Grab
Total Organic Carbon (mg/L)	NA	NA	NA	NL	1 per 6 Months	Grab
TP (mg/L)	NL	NA	NA	NL	1 per 6 Months ^(d)	Grab
TKN (mg/L)	NL	NA	NA	NL	1 per 6 Months ^(d)	Grab
Nitrite + Nitrate (mg/L)	NL	NA	NA	NL	1 per 6 Months ^(d)	Grab
TN (mg/L)	NL	NA	NA	NL	1 per 6 Months ^(d)	Calculated ^(e)
TSS (mg/L)	NL	NA	NA	NL	1 per 6 Months ^(d)	Grab

"NA" means not applicable.

"NL" means no limitation is established. Monitoring and reporting, however, are required.

- (a) A sample shall be taken at the required frequency during each monitoring period that a discharge occurs. For sampling periods in which no discharge occurs, the permittee shall continue to submit the required monthly DMR with the statement "No Discharge" indicated within the reporting sheet.
- (b) Monitoring frequency periods encompassing multiple months shall be in accordance with I.C.23 of this permit.
- (c) See Part I.C.6 for compliance reporting.
- (d) Semi-Annual nutrient monitoring is only required for the first two years of the permit, resulting in a total of 4 samples.
- (e) Total Nitrogen, which is the sum of the TKN and Nitrite + Nitrate, shall be derived from the results of those tests.

11. There shall be no discharge of tank bottom waters from Outfall 002.

A. STORMWATER MONITORING

12. During the period beginning with the permit's effective date and lasting until the permit's expiration date, the permittee is authorized to discharge stormwater runoff from outfalls:

Outfall serial number 050 – Central Drainage Area
 Outfall serial number 051 – East Central Drainage Area
 Outfall serial number 052 – North Side of Intake Drainage Area
 Outfall serial number 053 – South Side of Intake Drainage Area

These discharges shall be limited and monitored at the above outfall locations as specified below:

EFFLUENT CHARACTERISTICS	DISCHARGE LIMITATIONS				MONITORING REQUIREMENTS ^(a)	
	MONTHLY AVERAGE	WEEKLY AVERAGE	MINIMUM	MAXIMUM	FREQUENCY ^(b)	SAMPLE TYPE
Flow (MGD) ^(c)	NL	NA	NA	NL	1 per 6 Months	Estimate
Iron, Total (mg/L)	NA	NA	NA	NL	1 per 6 Months	Grab
TP (mg/L)	NL	NA	NA	NL	1 per 6 Months ^(d)	Grab
TKN (mg/L)	NL	NA	NA	NL	1 per 6 Months ^(d)	Grab
Nitrite + Nitrate (mg/L)	NL	NA	NA	NL	1 per 6 Months ^(d)	Grab
TN (mg/L)	NL	NA	NA	NL	1 per 6 Months ^(d)	Calculated ^(e)
TSS (mg/L)	NL	NA	NA	NL	1 per 6 Months ^(d)	Grab

"NA" means not applicable.

"NL" means no limitation is established. Monitoring and reporting however, are required.

- (a) A sample shall be taken at the required frequency during each monitoring period that a discharge occurs. For months in which no discharge occurs, the permittee shall continue to submit the required monthly DMR with the statement "No Discharge" indicated within the reporting sheet.
- (b) Monitoring frequency periods encompassing multiple months shall be in accordance with I.C.23 of this permit.
- (c) Estimate of the total volume of the discharge during the storm event.
- (d) Semi-Annual nutrient and sediment monitoring is only required for the first two years of the permit, resulting in a total of 4 samples.
- (e) Total Nitrogen, which is the sum of the TKN and Nitrite + Nitrate, shall be derived from the results of those tests.

13. See Part I.D.3.d for documentation, monitoring, and report requirements for substantially identical outfalls.

B. Additional Total Residual Chlorine and Bacterial Limitations and Monitoring Requirements – Outfall 101 (Sewage Treatment Plant)

1. The permittee shall monitor the TRC at the outlet of each operating chlorine contact tank three (3) times per day at 4 hour intervals by grab sample.
2. No more than nine (9) of all samples taken at the outlet of each operating chlorine contact tank shall be less than **1.5 mg/L** for any one calendar month.
3. No TRC sample collected at each outlet of any operating chlorine contact tank shall be less than **0.60 mg/L**.
4. If dechlorination facilities exist all samples above shall be collected prior to dechlorination.
5. If disinfection is by a method other than chlorination, Enterococci and Fecal coliform shall be limited and monitored by the permittee as specified below, and this requirement, if applicable, shall substitute for the TRC and Enterococci/Fecal coliform requirements delineated elsewhere in Part I.A.3 of this permit.

	MONTHLY AVERAGE	FREQUENCY	SAMPLE TYPE
Enterococci	35 N/100 mL (Geometric Mean)	2 per Week (between 10 am – 4 pm)	Grab
Fecal Coliform	200 N/100 mL (Geometric Mean)	2 per Week (between 10 am – 4 pm)	Grab

C. Other Requirements or Special Conditions

1. Notification Levels

The permittee shall notify the Department as soon as they know or have reason to believe:

- a. That any activity has occurred or will occur which would result in the discharge, on a routine or frequent basis, of any toxic pollutant which is not limited in this permit, if that discharge will exceed the highest of the following notification levels:
 - (1) One hundred micrograms per liter (100 µg/L);
 - (2) Two hundred micrograms per liter (200 µg/L) for acrolein and acrylonitrile; five hundred micrograms per liter (500 µg/L) for 2,4-dinitrophenol and for 2-methyl-4,6-dinitrophenol; and one milligram per liter (1.0 mg/L) for antimony;
 - (3) Five (5) times the maximum concentration value reported for that pollutant in the permit application; or
 - (4) The level established by the Board.
- b. That any activity has occurred or will occur which would result in any discharge, on a nonroutine or infrequent basis, of a toxic pollutant which is not limited in this permit, if that discharge will exceed the highest of the following notification levels:
 - (1) Five hundred micrograms per liter (500 µg/L);
 - (2) One milligram per liter (1.0 mg/L) for antimony;
 - (3) Ten (10) times the maximum concentration value reported for that pollutant in the permit application; or
 - (4) The level established by the Board.

2. Materials Handling and Storage

Any and all product, materials, industrial wastes, and/or other wastes resulting from the purchase, sale, mining, extraction, transport, preparation, and/or storage of raw or intermediate materials, final product, by-product or wastes, shall be handled, disposed of, and/or stored in such a manner and consistent with Best Management Practices so as not to permit a discharge of such product, materials, industrial wastes, and/or other wastes to State waters, except as expressly authorized.

3. Licensed Operator Requirement (Sewage Treatment Plant)

The permittee shall employ or contract at least one Class III licensed wastewater works operator for sewage treatment facility. The license shall be issued in accordance with Title 54.1 of the Code of Virginia and the regulations of the Board for Waterworks and Wastewater Works Operators and Onsite Sewage System Professionals. The permittee shall notify the Department in writing whenever he is not complying, or has grounds for anticipating he will not comply with this requirement. The notification shall include a statement of reasons and a prompt schedule for achieving compliance.

4. TMDL/Nutrient Reopener

This permit may be modified or, alternatively, revoked and reissued:

- a. If any approved wasteload allocation procedure, pursuant to Section 303(d) of the Clean Water Act, imposes wasteload allocations, limits or conditions on the facility that are not consistent with the permit requirements;
- b. To incorporate technology-based effluent concentration limitations for nutrients in conjunction with the installation of nutrient control technology, whether by new construction, expansion or upgrade, or
- c. To incorporate alternative nutrient limitations and/or monitoring requirements, should:
 - (1) the State Water Control Board adopt new nutrient standards for the water body receiving the discharge, including the Chesapeake Bay or its tributaries, or
 - (2) a future water quality regulation or statute requiring new or alternative nutrient control.

5. Operations and Maintenance Manual Requirement

The permittee shall maintain a current Operations and Maintenance (O&M) Manual for the treatment works that is in accordance with Virginia Pollutant Discharge Elimination System Regulations, 9VAC25-31 and Sewage Collection and Treatment Regulations, 9VAC25-790.

The O&M Manual and subsequent revisions shall include the manual effective date and meet Part II.K.2 and Part II.K.4 Signatory Requirements of the permit. Any changes in the practices and procedures followed by the permittee shall be documented in the O&M Manual no later than 90 days following the effective date of the changes. The permittee shall operate the treatment works in accordance with the O&M Manual and shall make the O&M manual available to Department personnel for review during facility inspections. No later than 30 days following a request by DEQ, the current O&M Manual shall be submitted to the DEQ Regional Office for review and approval.

The O&M manual shall detail the practices and procedures which will be followed to ensure compliance with the requirements of this permit. This manual shall include, but not necessarily be limited to, the following items, as appropriate:

- a. Permitted outfall locations and techniques to be employed in the collection, preservation, and analysis of effluent samples taken for compliance with this permit;
- b. Procedures for measuring and recording the duration and volume of treated wastewater discharged;
- c. Discussion of Best Management Practices, if applicable;
- d. Discussion of treatment works design, treatment works operation, routine preventative maintenance of units within the treatment works, critical spare parts inventory and record keeping;
- e. Plan for the management and/or disposal of waste solids and residues;

- f. Hours of operation and staffing requirements for the plant to ensure effective operation of the treatment works and maintain permit compliance;
- g. List of facility, local and state emergency contacts; and,
- h. Procedures for reporting and responding to any spills/overflows/treatment works upsets.

6. Compliance Reporting

- a. The quantification levels (QL) shall be less than or equal to the following concentrations:

<u>Effluent Characteristic</u>	<u>Quantification Level</u>
BOD ₅	2 mg/L
TSS	1.0 mg/L
Oil & Grease	5.0 mg/L
Total Petroleum Hydrocarbons	0.5 mg/L
Total Residual Chlorine	0.10 mg/L
Dissolved Copper	1.6 µg/L
Dissolved Zinc	22 µg/L
Total Iron	1.0 µg/L

The QL is defined as the lowest concentration used to calibrate a measurement system in accordance with the procedures published for the method. It is the responsibility of the permittee to ensure that proper quality assurance/quality control (QA/QC) protocols are followed during the sampling and analytical procedures. QA/QC information shall be documented to confirm that appropriate analytical procedures have been used and the required QLs have been attained. The permittee shall use any method in accordance with Part II.A of this permit.

- b. Reporting:

Monthly Average -- Compliance with the monthly average limitations and/or reporting requirements for the parameters listed in subsection a. of this permit condition shall be determined as follows: All concentration data below the QL used for the analysis shall be treated as zero. All concentration data equal to or above the QL used for the analysis shall be treated as it is reported. An arithmetic average shall be calculated using all reported data for the month, including the defined zeros. This arithmetic average shall be reported on the Discharge Monitoring Report (DMR) as calculated. If all data are below the QL used for the analysis (QL must be less than or equal to the QL listed in a. above), then the average shall be reported as "<QL". If reporting for quantity is required on the DMR and the reported monthly average concentration is <QL, then report "<QL" for the quantity. Otherwise use the reported concentration data (including the defined zeros) and flow data for each sample day to determine the daily quantity and report the monthly average of the calculated daily quantities.

For Total Phosphorus, all daily concentration data below the quantification level (QL) for the analytical method used should be treated as half the QL. All daily concentration data equal to or above the QL for the analytical method used shall be treated as it is reported.

For Total Nitrogen (TN), if none of the daily concentration data for the respective species (i.e., TKN, Nitrates/Nitrites) are equal to or above the QL for the respective analytical methods used, the daily TN concentration value reported shall equal one half of the largest QL used for the respective species. If one of the data is equal to or above the QL, the daily TN concentration value shall be treated as that data point is reported. If more than one of the data is above the QL, the daily TN concentration value shall equal the sum of the data points as reported.

Weekly Average -- Compliance with the weekly average limitations and/or reporting requirements for the parameters listed in subsection a. of this permit condition shall be determined as follows: All concentration data below the QL used for the analysis (QL must be less than or equal to the QL listed in a. above) shall be treated as zero. All concentration data equal to or above the QL used for the analysis shall be treated as reported. An arithmetic average shall be calculated using all reported data, including the defined zeros, collected within each complete calendar week and entirely contained within the reporting month. The maximum value of the weekly averages thus determined shall be reported on the DMR. If all data are below the QL used for the analysis, then the weekly average shall be reported as "<QL". If

reporting for quantity is required on the DMR and the reported weekly average concentration is <QL, then report "<QL" for the quantity. Otherwise use the reported concentration data (including the defined zeros) and flow data for each sample day to determine the daily quantity and report the maximum weekly average of the calculated daily quantities.

Daily Maximum -- Compliance with the daily maximum limitations and/or reporting requirements for the parameters listed in subsection a. of this permit condition shall be determined as follows: All concentration data below the QL used for the analysis (QL must be less than or equal to the QL listed in a. above) shall be treated as zero. All concentration data equal to or above the QL used for the analysis (QL must be less than or equal to the QL listed in a. above) shall be treated as reported. An arithmetic average shall be calculated using all reported data, including the defined zeros, collected within each day during the reporting month. The maximum value of these daily averages thus determined shall be reported on the DMR as the Daily Maximum. If all data are below the QL used for the analysis (QL must be less than or equal to the QL listed in a. above), then the maximum value of the daily averages shall be reported as "<QL". If reporting for quantity is required on the DMR and the reported daily maximum concentration is <QL, then report "<QL" for the quantity. Otherwise use the reported daily average concentrations (including the defined zeros) and corresponding daily flows to determine daily average quantities and report the maximum of the daily average quantities during the reporting month.

For Total Phosphorus, all daily concentration data below the quantification level (QL) for the analytical method used should be treated as half the QL. All daily concentration data equal to or above the QL for the analytical method used shall be treated as it is reported.

For Total Nitrogen (TN), if none of the daily concentration data for the respective species (i.e., TKN, Nitrates/Nitrites) are equal to or above the QL for the respective analytical methods used, the daily TN concentration value reported shall equal one half of the largest QL used for the respective species. If one of the data is equal to or above the QL, the daily TN concentration value shall be treated as that data point is reported. If more than one of the data is above the QL, the daily TN concentration value shall equal the sum of the data points as reported.

- c. **Single Datum** -- Any single datum required shall be reported as "<QL" if it is less than the QL used for the analysis (QL must be less than or equal to the QL listed in a. above). Otherwise the numerical value shall be reported.
- d. **Significant Digits** -- The permittee shall report at least the same number of significant digits as the permit limit for a given parameter. Regardless of the rounding convention used by the permittee (i.e., 5 always rounding up or to the nearest even number), the permittee shall use the convention consistently, and shall ensure that consulting laboratories employed by the permittee use the same convention.

7. Effluent Monitoring Frequencies

If the facility permitted herein is issued a Notice of Violation for any of the parameters listed below, then the following monitoring frequencies shall become effective upon written notice from DEQ, and remain in effect until the permit's expiration date:

Effluent Characteristic	Outfalls	
	102, 103, 104, 106, 107, 108, 109, 110, 111, 112, 113, 114, 115, 116, 117, 118, 119, 120, 121, 122	101
Flow	1 per Month	
pH	1 per Month	
TSS	1 per Month	
Oil and Grease	1 per Month	
BOD ₅		1 per Week

No other effluent limitations or monitoring requirements are affected by this special condition.

8. Oil Storage Groundwater Monitoring Reopener
As this facility currently manages ground water in order to maintain compliance with 9 VAC 25-91-10 et seq., the *Facility and Aboveground Storage Tank Regulation* (AST Regulation), this permit does not presently impose ground water monitoring requirements. However, this permit may be modified or alternately revoked and reissued to include ground water monitoring if it is not utilized by the permittee to fulfill the requirements of the AST Regulation.
9. Tank Bottom Waters & Pump and Haul Activities
All pump and haul activities involving the removal of tank bottom waters from the bulk storage tanks shall require that a report detailing the following be prepared and submitted to the Department of Environmental Quality by the 10th of the month following the activity:
 - a. The name of the contractor responsible for hauling the waste.
 - b. The date and time the contractor hauled the waste.
 - c. The final destination and disposition of the waste.
 - d. The disposal quantity of waste.
10. Intake Trash Racks
Debris collected on the intake trash racks shall not be returned to the waterway.
11. No Discharge of PCBs
There shall be no discharge of polychlorinated biphenyl compounds (PCBs) such as those commonly used for transformer fluid. Compliance with this requirement will be determined using EPA Method 608.
12. Discharges of Uncontaminated Water
There shall be no discharge of chemically contaminated process wastewater from the following points:
 - a. Backwash waters from the low level intake screen.
 - b. Backwash waters from the high level intake screen.
 - c. Discharges from the circulation water pump pit sumps.
 - d. Units 1 and 2 condensate tank.
 - e. Primary grade water heater well pit.
 - f. Units 1 and 2 primary grade water tank.
 - g. Chill water drain.
 - h. Emergency condensate tank.
 - i. Ground water relief system around the Unit 1 and 2 Containment and the Auxiliary and Fuel Building slabs.
13. Discharge of Chlorine in Cooling Water
Total residual chlorine may not be discharged from any single generating unit for more than two hours per day unless the discharger demonstrates to the Department of Environmental Quality that discharge for more than two hours is required for macroinvertebrate control. Simultaneous multi-unit chlorination is permitted.
14. Radioactivity Regulated by NRC
All limitations and monitoring requirements for radioactivity in the wastewater shall be regulated by the Nuclear Regulatory Commission.
15. No Discharge of Tank Bottom Waters
There shall be no discharge of tank bottom waters.

16. Water Quality Criteria Reopener
Should effluent monitoring indicate the need for any water quality-based limitations, this permit may be modified or alternatively revoked and reissued to incorporate appropriate limitations.
17. Treatment Works Closure Plan
If the permittee plans an expansion or upgrade to replace the existing treatment works, or if the facility is permanently closed, the permittee shall submit to the DEQ Regional Office a closure plan for the existing treatment works. The plan shall address the following information as a minimum: Verification of elimination of sources and/or alternate treatment scheme; treatment, removal and final disposition of residual wastewater and solids; removal/demolition/disposal of structures, equipment, piping and appurtenances; site grading, and erosion and sediment control; restoration of site vegetation; access control; fill materials; and proposed land use (post-closure) of the site. The plan should contain proposed dates for beginning and completion of the work. The plan must be approved by the DEQ prior to implementation. Once approved, the plan shall become an enforceable part of this permit and closure shall be implemented in accordance with the approved plan. No later than 14 calendar days following closure completion, the permittee shall submit to the DEQ Piedmont Regional Office written notification of the closure completion date and a certification of closure in accordance with the approved plan.
18. 95% Capacity Reopener (Sewage Treatment Plant)
A written notice and a plan of action for ensuring continued compliance with the terms of this permit shall be submitted to the DEQ, Piedmont Regional Office when the monthly average flow influent to the sewage treatment works reaches 95 percent of the design capacity authorized in this permit for each month of any three consecutive month period. The written notice shall be submitted within 30 days and the plan of action shall be received at the Piedmont Regional Office no later than 90 days from the third consecutive month for which the flow reached 95 percent of the design capacity. The plan shall include the necessary steps and a prompt schedule of implementation for controlling any current or reasonably anticipated problem resulting from high influent flows. Failure to submit an adequate plan in a timely manner shall be deemed a violation of the permit.
19. CTC, CTO Requirement (Sewage Treatment Plant)
The permittee shall, in accordance with the DEQ Sewage Collection and Treatment Regulation (9VAC25-790), obtain a Certificate to Construct (CTC), and a Certificate to Operate (CTO) from the DEQ Office of Wastewater Engineering (for Water Quality Improvement Funded (WQIF) projects) or from the DEQ Piedmont Regional Office (for non WQIF projects) prior to constructing wastewater treatment works and operating the treatment works, respectively. Non-compliance with the CTC or CTO shall be deemed a violation of the permit.

Upon issuance of a CTC for nutrient removal wastewater treatment technology, DEQ staff shall initiate modification, or alternately, revocation and reissuance, of this permit, to include annual concentration limits based on the nutrient removal technology listed in the CTC. Upon issuance of a CTO, any nutrient removal facilities installed shall be operated to achieve design effluent Total Nitrogen and Total Phosphorus concentrations.
20. Reliability Class (Sewage Treatment Plant)
The permitted sewage treatment works shall meet Reliability Class II.
21. Sludge Reopener (Sewage Treatment Plant)
The Board may promptly modify or revoke and reissue this permit if any applicable standard for sewage sludge use or disposal promulgated under Section 405(d) of the Clean Water Act is more stringent than any requirements for sludge use or disposal in this permit, or controls a pollutant or practice not limited in this permit.
22. Sludge Use and Disposal (Sewage Treatment Plant)
The permittee shall conduct all sewage sludge use or disposal activities in accordance with the Sludge Management Plan (SMP) approved with the issuance of this permit. Any proposed changes in the sewage sludge use or disposal practices or procedures followed by the permittee shall be documented and submitted for DEQ approval no later than 90 days prior to the effective date of the changes. Upon approval, the revised SMP becomes an enforceable part of the permit. The permit

may be modified or alternatively revoked and reissued to incorporate limitations or conditions necessitated by substantive changes in sewage sludge use or disposal practices.

23. Monitoring Frequencies Encompassing Multiple Months

Monitoring frequency periods encompassing multiple months shall be in accordance with the monitoring and reporting schedule specified below:

Monitoring Frequency	Monitoring Period		DMR Due Date
	From	To	
1 per Year	January 1	December 31	January 10
1 per 6 Months	January 1	June 30	July 10
	July 1	December 31	January 10
1 per 3 Months	January 1	March 31	April 10
	April 1	June 30	July 10
	July 1	September 30	October 10
	October 1	December 31	January 10
1 per 2 Months	January 1	February 28 (or 29)	March 10
	March 1	April 30	May 10
	May 1	June 30	July 10
	July 1	August 31	September 10
	September 1	October 31	November 10
	November 1	December 31	January 10

24. Concept Engineering Report (CER)

Prior to constructing any industrial wastewater treatment works, the permittee shall submit a Concept Engineering Report (CER) to the DEQ Piedmont Regional Office. DEQ written approval shall be secured prior to constructing any wastewater treatment works. The permittee shall construct the wastewater treatment works in accordance with the approved CER. No later than 14 days following completion of construction of any project for which a CER has been approved, written notification shall be submitted to the DEQ Piedmont Regional Office certifying that, based on an inspection of the project, construction was completed in accordance with the approved CER. The written notification shall be certified by a professional engineer licensed in the Commonwealth of Virginia or signed in accordance with Part II.K of this permit. The installed wastewater treatment works shall be operated to achieve design treatment and effluent concentrations. Approval by the Department of Environmental Quality does not relieve the owner of the responsibility for the correction of design and/or operational deficiencies. Noncompliance with the CER shall be deemed a violation of this permit.

Upon approval of a CER for the installation of nutrient removal technology, DEQ staff shall initiate modification, or alternatively, revocation and reissuance, of this permit to include annual concentration limits based on the technology proposed in the CER. Upon completion of construction in accordance with a CER that has been approved by the DEQ Piedmont Regional Office, any nutrient removal facilities installed shall be operated to achieve design effluent Total Nitrogen and Total Phosphorus concentrations.

25. Whole Effluent Toxicity (WET) Monitoring Program

a. Biological Monitoring:

In accordance with the schedule in Part I.C.25.c of this permit, the permittee shall perform annual toxicity testing using 24-hour flow-proportioned composite samples of final effluent from Outfall 001.

- (1) The chronic test to use is the Chronic Static Renewal 7-Day Survival, Growth, and Fecundity Test using *Americamysis bahia*.
- (2) These chronic tests shall be conducted in such a manner and at sufficient dilutions (minimum of five dilutions, derived geometrically) to determine the "No Observed Effect Concentration" (NOEC) for survival, growth, and fecundity. Results which cannot be determined (i.e., a "less than" NOEC value) are not acceptable, and a retest shall be

performed. The test NOEC should be expressed using Chronic Toxic Units (TU_c), which are determined by dividing the NOEC value into 100 (100/NOEC), the TU_c result shall be reported with each toxicity report submittal. The LC_{50} at 48 hours and the IC_{25} with the NOEC's shall also be included in the test report.

- b. The test dilutions should be able to assess effluent toxicity with the following endpoint(s):

Chronic NOEC of 48%, equivalent to a TU_c of 2.08.

The test data will be evaluated statistically by DEQ for reasonable potential at the conclusion of the permit term, or sooner if toxicity has been noted. Should DEQ evaluation of the data indicate that a limit is needed, the permit may be modified or, alternatively, revoked and reissued to include a WET limit and compliance schedule. Following written notification from DEQ of the need for including a WET limitation, the toxicity tests in Part I.C.26.a may be discontinued.

The permittee may provide additional samples to address data variability; these data shall be reported and may be included in the evaluation of effluent toxicity. Test procedures and reporting shall be in accordance with the WET testing methods cited in 40 CFR 136.3

- c. Reporting Schedule:

The permittee shall submit a copy of each toxicity test report specified in this Toxics Management Program in accordance with the following schedule:

<u>Compliance Date</u>	<u>Submittal Date</u>
01/01/2017 - 12/31/2017	By 01/10/2018
01/01/2018 - 12/31/2018	By 01/10/2019
01/01/2019 - 12/31/2019	By 01/10/2020
01/01/2020 - 12/31/2020	By 01/10/2021
01/10/2021 - 12/31/2021	By 01/10/2022

26. Dredge Sediment Pond Discharge

The permittee is authorized to discharge water from the sediments management pond to the Intake Canal. The discharge shall not cause or contribute to the violation of the Water Quality standards at Outfall 001.

27. Beyond Design Basis (BDB) Pumps Testing Discharge

The permittee is authorized to discharge Beyond Design Basis pumps test water to the Intake Canal and to the Settling Basin (Outfall 108). Condensate water will be used to test the pumps.

D. Stormwater Management Conditions

1. Form 2F Sampling:

The completed Part VII of Form 2F for Outfall 002 and Outfalls 050, 051, and 052 (representative of Outfall 053) shall be submitted with the permit reissuance application. Additionally, the permittee shall submit a report with the permit reissuance application which identifies all industrial activities, as defined in 9VAC25-151 (*General VPDES Permit for Discharge of Stormwater Associated with Industrial Activity*), which occur within the drainage areas contributing to the stormwater outfalls identified in Part I.A.10 and Part I.A.12 of this permit. Should stormwater monitoring, or additional industrial activities identified by the permittee, indicate the need for revisions to the stormwater requirements contained in Part D of this permit, this permit may be modified or alternatively revoked and reissued to incorporate appropriate stormwater requirements.

2. Stormwater Management Evaluation

The Stormwater Pollution Prevention Plan (SWPPP), which is to be developed and maintained in accordance with subsection I.D.4 below, shall have a goal of reducing pollutants discharges from all the regulated industrial activity stormwater outfalls.

a. Pollutant Specific Screening

One goal of the SWPPP shall place emphasis on reducing, to the maximum extent practicable, the following pollutants in the outfalls noted below:

Outfall No.	Pollutants	Comparative Value
002	Dissolved Copper	7.3 µg/L
002	Dissolved Zinc	72 µg/L

- b. The effectiveness of the SWPPP will be evaluated via the required monitoring for all parameters listed in Part I.A.10 and Part I.A.12 of this permit for the regulated stormwater outfalls, including the specific pollutants noted in a. above. Monitoring results that are above the comparative value for the specific pollutants in a. above will justify the need to reexamine the SWPPP for the affected outfall. In addition, the permittee shall amend the SWPPP whenever there is a change in the facility or its operation which materially increases the potential for activities to result in a discharge of significant amounts of pollutants.

No later than February 10 of each year, the permittee shall submit to the DEQ Piedmont Regional Office an annual report which includes the pollutant-specific monitoring data from the outfalls included in this condition along with a summary of any steps taken to modify the SWPPP based on the monitoring data.

3. Stormwater Special Conditions

a. Sample Type.

For all stormwater monitoring required in Part I.A.10 and Part I.A.12 or other applicable sections of this permit, a minimum of one grab sample shall be taken. Unless otherwise specified, all such samples shall be collected from the discharge resulting from a storm event that occurs at least 72 hours from the previously measurable storm event (a "measurable storm event" is defined as a storm event that results in an actual discharge from the site). The required 72-hour storm event interval is waived where the permittee documents that less than a 72-hour interval is representative for local storm events during the season when sampling is being conducted. The grab sample shall be taken during the first 30 minutes of the discharge. If the collection of a grab sample during the first 30 minutes is impracticable, a grab sample can be taken during the first three hours of the discharge, and the permittee shall submit with the monitoring report a description of why a grab sample during the first 30 minutes was impracticable. If stormwater discharges associated with industrial activity commingle with process or non-process water, then where practicable permittees must attempt to sample the stormwater discharge before it mixes with the non-stormwater discharge.

b. Recording of Results.

For each measurement or sample taken pursuant to the storm event monitoring requirements of this permit, the permittee shall record and report with the Discharge Monitoring Reports (DMRs) the following information:

- (1) The date and duration (in hours) of the storm event(s) sampled;
- (2) The rainfall total (in inches) of the storm event which generated the sampled discharge; and
- (3) The duration between the storm event sampled and the end of the previous measurable storm event.

c. Sampling Waiver.

When a permittee is unable to collect stormwater samples required in Part I.A.10 and Part I.A.12 or other applicable sections of this permit within a specified sampling period due to adverse climatic conditions, the permittee shall collect a substitute sample from a separate qualifying event in the next period and submit these data along with the data for the routine sample in that period. Adverse weather conditions that may prohibit the collection of samples include weather conditions that create dangerous conditions for personnel (such as local flooding, high winds, hurricane, tornadoes, electrical storms, etc.) or otherwise make the collection of a sample impracticable (drought, extended frozen conditions, etc.).

d. Representative Outfalls – Substantially Identical Discharges.

If the facility has two or more outfalls that discharge substantially identical effluents, based on similarities of the industrial activities, significant materials, size of drainage areas, and stormwater management practices occurring within the drainage areas of the outfalls, the permittee may conduct monitoring on the effluent of just one of the outfalls and report that the observations also apply to the substantially identical outfall(s). The substantially identical outfall monitoring provisions apply to quarterly visual monitoring, benchmark monitoring and impaired waters monitoring. The substantially identical outfall monitoring provisions are not available for numeric effluent limits monitoring.

The permittee shall include the following information in the SWPPP, and in any DMRs that are required to be submitted to the DEQ:

- (1) The locations of the outfalls;
- (2) Why the outfalls are expected to discharge substantially identical effluents, including evaluation of monitoring data, where available; and
- (3) Estimates of the size of the drainage area (in square feet) for each of the outfalls.

e. Quarterly Visual Examination of Stormwater Quality.

- (1) The permittee must perform and document a quarterly visual examination of a stormwater discharge associated with industrial activity from each outfall, except discharges exempted below. The examination(s) must be made at least once in each of the following three-month periods: January through March, April through June, July through September, and October through December. The visual examination shall be made during normal working hours. If no storm event resulted in runoff from the facility during a monitoring quarter, the permittee is excused from visual monitoring for that quarter provided that documentation is included with the monitoring records indicating that no runoff occurred. The documentation must be signed and certified in accordance with Part II.K of this permit.
- (2) Visual examinations must be made of samples collected in accordance with Part I.D.3.a. The examination must document observations of color, odor, clarity, floating solids, settled solids, suspended solids, foam, oil sheen, and other obvious indicators of stormwater pollution. The examination must be conducted in a well-lit area. No analytical tests are required to be performed on the samples.
- (3) The visual examination reports must be maintained on-site with the Stormwater Pollution Prevention Plan (SWPPP). The report must include the outfall location, the examination date and time, examination personnel, the nature of the discharge (i.e., runoff or snow melt), visual quality of the stormwater discharge (including observations of color, odor, clarity, floating solids, settled solids, suspended solids, foam, oil sheen, and other obvious indicators of stormwater pollution), and probable sources of any observed stormwater contamination.

f. Authorized Non-stormwater Discharges.

- (1) The following non-stormwater discharges are authorized by this permit:
 - (a) Discharges from fire fighting activities;
 - (b) Fire hydrant flushings;
 - (c) Potable water including water line flushings;
 - (d) Uncontaminated condensate from air conditioners, coolers, and other compressors and from the outside storage of refrigerated gases or liquids;
 - (e) Irrigation drainage;
 - (f) Landscape watering provided all pesticides, herbicides, and fertilizer have been applied in accordance with the approved labeling;

- (g) Pavement wash waters where no detergents are used and no spills or leaks of toxic or hazardous materials have occurred (unless all spilled material has been removed);
- (h) Routine external building washdown which does not use detergents;
- (i) Uncontaminated ground water or spring water;
- (j) Foundation or footing drains where flows are not contaminated with process materials;
- (k) Incidental windblown mist from cooling towers that collects on rooftops or adjacent portions of the facility, but NOT intentional discharges from the cooling tower (e.g., "piped" cooling tower blowdown or drains);
- (l) Demineralized water; and
- (m) Untreated river water.

- (2) All other non-stormwater discharges are not authorized and shall either be eliminated or covered under a separate VPDES permit.

g. Releases of Hazardous Substances or Oil in Excess of Reportable Quantities.

The discharge of hazardous substances or oil in the stormwater discharge(s) from the facility shall be prevented or minimized in accordance with the stormwater pollution prevention plan for the facility. This permit does not authorize the discharge of hazardous substances or oil resulting from an on-site spill. This permit does not relieve the permittee of the reporting requirements of 40 CFR 110, 40 CFR 117 and 40 CFR 302 or § 62.1-44.34:19 of the Code of Virginia. Where a release containing a hazardous substance or oil in an amount equal to or in excess of a reportable quantity established under either 40 CFR 110, 40 CFR 117 or 40 CFR 302 occurs during a 24-hour period:

- (1) The permittee is required to notify the Department in accordance with the requirements of Part II.G as soon as he or she has knowledge of the discharge;
- (2) Where a release enters a municipal separate storm sewer system (MS4), the permittee shall also notify the owner or the MS4; and
- (3) The stormwater pollution prevention plan required by this permit must be reviewed to identify measures to prevent the reoccurrence of such releases and to respond to such releases, and the plan must be modified where appropriate.

h. Water Quality Protection

The discharges authorized by this permit shall be controlled as necessary to meet applicable water quality standards. DEQ expects that compliance with the conditions in this permit will control discharges as necessary to meet applicable water quality standards.

i. Corrective actions

- (1) Data exceeding benchmarks concentration values.

- (a) If the benchmark monitoring result exceeds the benchmark concentration value for that parameter, the permittee shall review the SWPPP and modify it as necessary to address any deficiencies that caused the exceedance. Revisions to the SWPPP shall be completed within 30 days after an exceedance is discovered. When control measures need to be modified or added (distinct from regular preventive maintenance of existing control measures described in Part I.D.4.c), implementation shall be completed before the next anticipated storm event if possible, but no later than 60 days after the exceedance is discovered, or as otherwise provided or approved by the DEQ Piedmont Regional Office. In cases where construction is necessary to implement control measures, the permittee shall include a schedule in the SWPPP that provides for the completion of the control measures as expeditiously as practicable, but no later than three years after the exceedance is discovered. Where a construction compliance schedule is included in the SWPPP, the plan shall include appropriate nonstructural and temporary controls to be implemented in the affected portion(s) of the facility prior to completion of the permanent control measures. Any control measure modifications shall be documented and dated, and retained with the SWPPP, along with the amount of

time taken to modify the applicable control measures or implement additional control measures.

- (b) Natural background pollutant levels. If the concentration of a pollutant exceeds a benchmark concentration value, and the permittee determines that exceedance of the benchmark is attributable solely to the presence of that pollutant in the natural background, corrective action is not required provided that:
 - (i) The concentration of the benchmark monitoring result is less than or equal to the concentration of that pollutant in the natural background;
 - (ii) The permittee documents and maintains with the SWPPP the supporting rationale for concluding that benchmark exceedances are in fact attributable solely to natural background pollutant levels. The supporting rationale shall include any data previously collected by the facility or others (including literature studies) that describe the levels of natural background pollutants in the facility's stormwater discharges; and
 - (iii) The permittee notifies the DEQ Piedmont Regional Office on the DMR that the benchmark exceedances are attributable solely to natural background pollutant levels. Natural background pollutants include those substances that are naturally occurring in soils or groundwater. Natural background pollutants do not include legacy pollutants from earlier activity on the facility's site, or pollutants in run-on from neighboring sources which are not naturally occurring.
- (2) Corrective actions. The permittee shall take corrective action whenever:
 - (a) Routine facility inspections, comprehensive site compliance evaluations, inspections by local, state or federal officials, or any other process, observation or event result in a determination that modifications to the stormwater control measures are necessary to meet the permit requirements; or
 - (b) There is any exceedance of an effluent limitation (including coal pile runoff), or TMDL wasteload allocation; or
 - (c) The DEQ Piedmont Regional Office determines, or the permittee becomes aware, that the stormwater control measures are not stringent enough for the discharge to meet applicable water quality standards.

The permittee shall review the SWPPP and modify it as necessary to address any deficiencies. Revisions to the SWPPP shall be completed within 30 days following the discovery of the deficiency. When control measures need to be modified or added (distinct from regular preventive maintenance of existing BMPs described in Part I.D.4.c), implementation shall be completed before the next anticipated storm event if possible, but no later than 60 days after the deficiency is discovered, or as otherwise provided or approved by the DEQ Piedmont Regional Office. In cases where construction is necessary to implement control measures, the permittee shall include a schedule in the SWPPP that provides for the completion of the control measures as expeditiously as practicable, but no later than three years after the deficiency is discovered. Where a construction compliance schedule is included in the SWPPP, the plan shall include appropriate nonstructural and/or temporary controls to be implemented in the affected portion(s) of the facility prior to completion of the permanent control measure. The amount of time taken to modify a control measure or implement additional control measures shall be documented in the SWPPP.

Any corrective actions taken shall be documented and retained with the SWPPP. Reports of corrective actions shall be signed in accordance with Part II.K.

- (3) Follow-up reporting. If at any time monitoring results indicate that discharges from the facility exceed an effluent limitation or a TMDL wasteload allocation, or the DEQ Piedmont Regional Office determines that discharges from the facility are causing or contributing to an exceedance of a water quality standard, immediate steps shall be taken to eliminate the exceedances in accordance with the above Part I.D.3.i(2) (Corrective actions). Within 30 calendar days of implementing the relevant corrective action(s), an exceedance report shall be submitted to the DEQ Piedmont Regional Office. The following information shall be included in the report: permit number; facility name, address and location; receiving water;

monitoring data from the event; an explanation of the situation; description of what has been done and the intended actions (should the corrective actions not yet be complete) to further reduce pollutants in the discharge; and an appropriate contact name and phone number.

j. **Additional Requirements for Salt Storage.**

Storage piles of salt or piles containing salt used for deicing or other commercial or industrial purposes shall be enclosed or covered to prevent exposure to precipitation. The permittee shall implement appropriate measures (e.g., good housekeeping, diversions, containment) to minimize exposure resulting from adding to or removing materials from the pile. All salt storage piles shall be located on an impervious surface. All runoff from the pile, and/or runoff that comes in contact with salt, including under drain systems, shall be collected and contained within a bermed basin lined with concrete or other impermeable materials, or within an underground storage tank(s), or within an above ground storage tank(s), or disposed of through a sanitary sewer (with the permission of the treatment facility). A combination of any or all of these methods may be used. In no case shall salt contaminated stormwater be allowed to discharge directly to the ground or to state waters.

4. **Stormwater Pollution Prevention Plan**

A stormwater pollution prevention plan (SWPPP) shall be developed and implemented for the facility. The SWPPP is intended to document the selection, design and installation of control measures, including BMPs to eliminate or reduce the pollutants in all stormwater discharges from the facility and to meet applicable effluent limitations and water quality standards.

Permittees shall implement the provisions of the stormwater pollution prevention plan as a condition of this permit.

The stormwater pollution prevention plan requirements of this permit may be fulfilled, in part, by incorporating by reference other plans or documents such as a spill prevention control and countermeasure (SPCC) plan developed for the facility under Section 311 of the Clean Water Act, or best management practices (BMP) programs otherwise required for the facility, provided that the incorporated plan meets or exceeds the plan requirements of Part I.D.4.b (Contents of the Plan). All plans incorporated by reference into the stormwater pollution prevention plan become enforceable under this permit. If a plan incorporated by reference does not contain all of the required elements of the SWPPP of Part I.D.4.b the permittee shall develop the missing SWPPP elements and include them in the required plan.

a. **Deadlines for Plan Preparation and Compliance.**

- (1) The facility shall prepare and implement any revisions to the SWPPP as expeditiously as practicable, but not later than 90 days from the effective date of the permit.
- (2) **Measures That Require Construction.** In cases where construction is necessary to implement measures required by the plan, the plan shall contain a schedule that provides compliance with the plan as expeditiously as practicable, but no later than 3 years after the effective date of this permit. Where a construction compliance schedule is included in the plan, the schedule shall include appropriate nonstructural and/or temporary controls to be implemented in the affected portion(s) of the facility prior to completion of the permanent control measure.

b. **Contents of the Plan.**

The contents of the SWPPP shall comply with the requirements listed below. The plan shall include, at a minimum, the following items:

- (1) **Pollution Prevention Team.** The plan shall identify the staff individuals by name or title who comprise the facility's stormwater pollution prevention team. The pollution prevention team is responsible for assisting the facility or plant manager in developing, implementing, maintaining, revising, and ensuring compliance with the facility's SWPPP. Specific responsibilities of each staff individual on the team shall be identified and listed.
- (2) **Site Description.** The SWPPP shall include the following:

- (a) Activities at the Facility. A description of the nature of the industrial activities at the facility.
 - (b) General Location Map. A general location map (e.g., USGS quadrangle or other map) with enough detail to identify the location of the facility and the receiving waters within one mile of the facility.
 - (c) Site Map. A site map identifying the following:
 - (i) The boundaries of the property and the size of the property (in acres);
 - (ii) The location and extent of significant structures and impervious surfaces (roofs, paved areas and other impervious areas);
 - (iii) Locations of all stormwater conveyances including ditches, pipes, swales, and inlets, and the directions of stormwater flow (use arrows to show which ways stormwater will flow);
 - (iv) Locations of all existing structural and source control measures, including BMPs;
 - (v) Locations of all surface water bodies, including wetlands;
 - (vi) Locations of potential pollutant sources identified under Part I.D.4.b(3);
 - (vii) Locations where significant spills or leaks identified under Part I.D.4.b(4) have occurred;
 - (viii) Locations of the following activities where such activities are exposed to precipitation: fueling stations; vehicle and equipment maintenance and cleaning areas; loading and unloading areas; locations used for the treatment, storage or disposal of wastes; liquid storage tanks; processing and storage areas; access roads, rail cars and tracks; transfer areas for substances in bulk; and machinery;
 - (ix) Locations of stormwater outfalls and an approximate outline of the area draining to each outfall, and location of municipal storm sewer systems, if the stormwater from the facility discharges to them;
 - (x) Location and description of all non-stormwater discharges;
 - (xi) Location of any storage piles containing salt used for deicing or other commercial or industrial purposes; and
 - (xii) Locations and sources of run-on to the site from adjacent property, where the run-on contains significant quantities of pollutants; and
 - (xiii) Locations of all stormwater monitoring points.
 - (d) Receiving Waters and Wetlands. The name of all surface waters receiving discharges from the site, including intermittent streams, dry sloughs, and arroyos. Provide a description of wetland sites that may receive discharges from the facility. If the facility discharges through a municipal separate storm sewer system (MS4), identify the MS4 operator, and the receiving water to which the MS4 discharges.
- (3) Summary of Potential Pollutant Sources. The plan shall identify each separate area at the facility where industrial materials or activities are exposed to stormwater. Industrial materials or activities include, but are not limited to: material handling equipment or activities, industrial machinery, raw materials, industrial production and processes, intermediate products, byproducts, final products, and waste products. Material handling activities include, but are not limited to: the storage, loading and unloading, transportation, disposal, or conveyance of any raw material, intermediate product, final product or waste product. For each separate area identified, the description shall include:
- (a) Activities in the area. A list of the industrial activities exposed to stormwater (e.g., material storage, equipment fueling and cleaning, cutting steel beams);
 - (b) Pollutants. A list of the pollutant(s) or pollutant constituents (e.g., crankcase oil-zinc, sulfuric acid, cleaning solvents, etc.) associated with each activity. The pollutant list

shall include all significant materials handled, treated, stored or disposed that have been exposed to stormwater in the three years prior to the date this SWPPP was prepared or amended. The list shall include any hazardous substances or oil at the facility.

- (4) Spills and Leaks. The SWPPP shall clearly identify areas where potential spills and leaks that can contribute pollutants to stormwater discharges can occur and their corresponding outfalls. The plan shall include a list of significant spills and leaks of toxic or hazardous pollutants that actually occurred at exposed areas, or that drained to a stormwater conveyance during the three-year period prior to the date this SWPPP was prepared or amended. The list shall be updated if significant spills or leaks occur in exposed areas of the facility during the term of the permit. Significant spills and leaks include, but are not limited to, releases of oil or hazardous substances in excess of reportable quantities.
- (5) Sampling Data. The plan shall include a summary of existing stormwater discharge sampling data taken at the facility. The summary shall include, at a minimum, any data collected during the previous permit term.
- (6) Stormwater Controls
 - (a) Control measures shall be implemented for all the areas identified in Part I.D.4.b(3) (Summary of Potential Pollutant Sources) to prevent or control pollutants in stormwater discharges from the facility. Regulated stormwater discharges from the facility include stormwater run-on that commingles with stormwater discharges associated with industrial activity at the facility. The SWPPP shall describe the type, location and implementation of all control measures for each area where industrial materials or activities are exposed to stormwater. Selection of control measures shall take into consideration:
 - (i) That preventing stormwater from coming into contact with polluting materials is generally more effective, and less costly, than trying to remove pollutants from stormwater;
 - (ii) Control measures generally shall be used in combination with each other for most effective water quality protection;
 - (iii) Assessing the type and quantity of pollutants, including their potential to impact receiving water quality, is critical to designing effective control measures;
 - (iv) That minimizing impervious areas at the facility can reduce runoff and improve groundwater recharge and stream base flows in local streams (however, care must be taken to avoid ground water contamination);
 - (v) Flow attenuation by use of open vegetated swales and natural depressions can reduce in-stream impacts of erosive flows;
 - (vi) Conservation or restoration of riparian buffers will help protect streams from stormwater runoff and improve water quality; and
 - (vii) Treatment interceptors (e.g., swirl separators and sand filters) may be appropriate in some instances to minimize the discharge of pollutants.
 - (b) Nonnumeric technology-based effluent limits. The permittee shall implement the following types of control measures to prevent and control pollutants in the stormwater discharges from the facility, unless it can be demonstrated and documented that such controls are not relevant to the discharges (e.g., there are no storage piles containing salt).
 - (i) Good Housekeeping. The permittee shall keep clean all exposed areas of the facility that are potential sources of pollutants to stormwater discharges. Typical problem areas include areas around trash containers, storage areas, loading docks, and vehicle fueling and maintenance areas. The plan shall include a schedule for regular pickup and disposal of waste materials, along with routine inspections for leaks and conditions of drums, tanks and containers.

- (ii) **Eliminating and Minimizing Exposure.** To the extent practicable, manufacturing, processing and material storage areas (including loading and unloading, storage, disposal, cleaning, maintenance, and fueling operations) shall be located inside, or protected by a storm-resistant covering to prevent exposure to rain, snow, snowmelt, and runoff. Note: Eliminating exposure at all industrial areas may make the facility eligible for the "Conditional Exclusion for No Exposure" provision of 9VAC25-31-120 E, thereby eliminating the need to have a permit.
- (iii) **Preventive Maintenance.** The permittee shall have a preventive maintenance program that includes regular inspection, testing, maintenance and repairing of all industrial equipment and systems to avoid situations that could result in leaks, spills and other releases of pollutants in stormwater discharge from the facility. This program is in addition to the specific control measure maintenance required under Part I.D.4.c (Maintenance of BMPs).
- (iv) **Spill Prevention and Response Procedures.** The plan shall describe the procedures that will be followed for preventing and responding to spills and leaks, including:
 - (A) Preventive measures such as barriers between material storage and traffic areas, secondary containment provisions, and procedures for material storage and handling.
 - (B) Response procedures, including notification of appropriate facility personnel, emergency agencies, and regulatory agencies, and procedures for stopping, containing and cleaning up spills. Measures for cleaning up hazardous material spills or leaks shall be consistent with applicable RCRA regulations at 40 CFR Part 264 and 40 CFR Part 265. Employees who may cause, detect or respond to a spill or leak shall be trained in these procedures and have necessary spill response equipment available. If possible, one of these individuals shall be a member of the Pollution Prevention Team;
 - (C) Procedures for plainly labeling containers (e.g., "used Oil," "Spent Solvents," "Fertilizers and Pesticides," etc.) that could be susceptible to spillage or leakage to encourage proper handling and facilitate rapid response if spills or leaks occur; and
 - (D) Contact information for individuals and agencies that must be notified in the event of a spill shall be included in the SWPPP, and in other locations where it will be readily available.
- (v) **Routine Facility Inspections.** Facility personnel who possess the knowledge and skills to assess conditions and activities that could impact stormwater quality at the facility, and who can also evaluate the effectiveness of control measures shall regularly inspect all areas of the facility where industrial materials or activities are exposed to stormwater. These inspections are in addition to, or as part of, the comprehensive site evaluation required under Part I.D.4.d. At least one member of the Pollution Prevention Team shall participate in the routine facility inspections.

The inspection frequency shall be specified in the plan based upon a consideration of the level of industrial activity at the facility, but shall be a minimum of quarterly unless more frequent intervals are specified elsewhere in the permit or written approval is received from the Department for less frequent intervals. At least once each calendar year, the routine facility inspection must be conducted during a period when a stormwater discharge is occurring.

Any deficiencies in the implementation of the SWPPP that are found shall be corrected as soon as practicable, but not later than within 30 days of the inspection, unless permission for a later date is granted in writing by the Director. The results of the inspections shall be documented in the SWPPP, and shall include at a minimum;

- (A) The inspection date and time;
 - (B) The name and signature of the inspector(s);
 - (C) Weather information and a description of any discharges occurring at the time of the inspection;
 - (D) Any previously unidentified discharges of pollutants from the site;
 - (E) Any control measures needing maintenance or repairs;
 - (F) Any failed control measures that need replacement;
 - (G) Any incidents of noncompliance observed; and
 - (H) Any additional control measures needed to comply with the permit requirements.
- (vi) Employee Training. The permittee shall implement a stormwater employee training program for the facility. The SWPPP shall include a schedule for all types of necessary training, and shall document all training sessions and the employees who received the training. Training shall be provided for all employees who work in areas where industrial materials or activities are exposed to stormwater, and for employees who are responsible for implementing activities identified in the SWPPP (e.g., inspectors, maintenance personnel, etc.). The training shall cover the components and goals of the SWPPP, and include such topics as spill response, good housekeeping, material management practices, control measures operation and maintenance, etc. The SWPPP shall include a summary of any training performed.
- (vii) Sediment and Erosion Control. The plan shall identify areas at the facility that, due to topography, land disturbance (e.g., construction, landscaping, site grading), or other factors, have a potential for soil erosion. The permittee shall identify and implement structural, vegetative, and stabilization control measures to prevent or control on-site and off-site erosion and sedimentation. Flow velocity dissipation devices shall be placed at discharge locations and along the length of any outfall channel if the flows would otherwise create erosive conditions.
- (viii) Management of Runoff. The plan shall describe the stormwater runoff management practices (i.e., permanent structural control measures) for the facility. These types of control measures are typically used to divert, infiltrate, reuse, or otherwise reduce pollutants in stormwater discharges from the site.
- Structural control measures may require a separate permit under § 404 of the CWA and the Virginia Water Protection Permit Program Regulation (9VAC25-210) before installation begins.
- (ix) Dust suppression and vehicle tracking of industrial materials. The permittee shall implement control measures to minimize the generation of dust and off-site tracking of raw, final, or waste materials. Stormwater collected on site may be used for the purposes of dust suppression or for spraying stockpiles. Potable water, well water and uncontaminated reuse water may also be used for this purpose. There shall be no direct discharge to surface waters from dust suppression activities or as a result of spraying stockpiles.

c. Maintenance.

The SWPPP shall include a description of procedures and a regular schedule for preventive maintenance of all control measures, and shall include a description of the back-up practices that are in place should a runoff event occur while a control measure is off-line. The effectiveness of nonstructural control measures shall also be maintained by appropriate means (e.g., spill response supplies available and personnel trained, etc.).

All control measures identified in the SWPPP shall be maintained in effective operating condition and shall be observed at least annually during active operation (i.e., during a

stormwater runoff event) to ensure that they are functioning correctly. Where discharge locations are inaccessible, nearby downstream locations shall be observed. The observations shall be documented in the SWPPP.

If site inspections required by Part I.D.4.b(6)(b)(v) (Routine Facility Inspections) or Part I.D.4.d (Comprehensive Site Compliance Evaluation) identify control measures that are not operating effectively, repairs or maintenance shall be performed before the next anticipated storm event. If maintenance prior to the next anticipated storm event is not possible, maintenance shall be scheduled and accomplished as soon as practicable. In the interim, back-up measures shall be employed and documented in the SWPPP until repairs or maintenance is complete. Documentation shall be kept with the SWPPP of maintenance and repairs of control measures, including the date(s) of regular maintenance, date(s) of discovery of areas in need of repair or replacement, date(s) for repairs, date(s) that the control measure(s) returned to full function, and the justification for any extended maintenance or repair schedules.

d. Comprehensive Site Compliance Evaluation.

The permittee shall conduct comprehensive site compliance evaluations at least once each calendar year. The evaluations shall be done by qualified personnel who possess the knowledge and skills to assess conditions and activities that could impact stormwater quality at the facility, and who can also evaluate the effectiveness of control measures. The personnel conducting the evaluations may be either facility employees or outside personnel hired by the facility.

- (1) Scope of the Compliance Evaluation. Evaluations shall include all areas where industrial materials or activities are exposed to stormwater, as identified in Part I.D.4.b(3). The personnel shall evaluate:
 - (a) Industrial materials, residue or trash that may have or could come into contact with stormwater;
 - (b) Leaks or spills from industrial equipment, drums, barrels, tanks or similar containers that have occurred within the past three years;
 - (c) Off-site tracking of industrial or waste materials or sediment where vehicles enter or exit the site;
 - (d) Tracking or blowing of raw, final, or waste materials from areas of no exposure to exposed areas;
 - (e) Evidence of, or the potential for, pollutants entering the drainage system;
 - (f) Evidence of pollutants discharging to surface waters at all facility outfalls, and the condition of and around the outfall, including flow dissipation measures to prevent scouring;
 - (g) Review of stormwater related training performed, inspections completed, maintenance performed, quarterly visual examinations, and effective operation of control measures including BMPs;
 - (h) Results of both visual and any analytical monitoring done during the past year shall be taken into consideration during the evaluation.
- (2) Based on the results of the evaluation, the SWPPP shall be modified as necessary (e.g., show additional controls on the map required by Part I.D.4.b(2)(c); revise the description of controls required by Part I.D.4.b(6) to include additional or modified BMPs designed to correct problems identified). Revisions to the SWPPP shall be completed within 30 days following the evaluation, unless permission for a later date is granted in writing by the Director. If existing control measures need to be modified or if additional BMPs are necessary, implementation shall be completed before the next anticipated storm event, if practicable, but not more than 60 days after completion of the comprehensive site evaluation, unless permission for a later date is granted in writing by the Department;

- (3) Compliance Evaluation Report. A report shall be written summarizing the scope of the evaluation, name(s) of personnel making the evaluation, the date of the evaluation, and all observations relating to the implementation of the SWPPP, including elements stipulated in Part I.D.4.d(1)(a) through (h) above. Observations shall include such things as: the location(s) of discharges of pollutants from the site; location(s) of previously unidentified sources of pollutants; location(s) of control measures that need to be maintained or repaired; location(s) of failed control measures that need replacement; and location(s) where additional control measures are needed. The report shall identify any incidents of noncompliance that were observed. Where a report does not identify any incidents of noncompliance, the report shall contain a certification that the facility is in compliance with the SWPPP and this permit. The report shall be signed in accordance with Part II.K and maintained with the SWPPP.
 - (4) Where compliance evaluation schedules overlap with routine inspections required under Part I.D.4.b(6)(b)(v) the annual compliance evaluation may be used as one of the routine inspections.
- e. Signature and Plan Review.
- (1) Signature and location. The SWPPP, including revisions to the SWPPP to document any corrective actions taken as required by Part I.D.3.i shall be signed in accordance with Part II K, dated, and retained on-site at the facility covered by this permit in accordance with Part II.B.2. All other changes to the SWPPP, and other permit compliance documentation, shall be signed and dated by the person preparing the change or documentation.
 - (2) Availability. The permittee shall retain a copy of the current SWPPP required by this permit at the facility, and it shall be immediately available to the department, EPA or the operator of an MS4 receiving discharges from the site at the time of an onsite inspection or upon request.
 - (3) Required Modifications. The permittee shall modify the SWPPP whenever necessary to address any corrective actions required by Part I.D.3.i. Changes to the SWPPP shall be made in accordance with the corrective action deadlines in Part I.D.3.i(2), and shall be signed and dated in accordance with Part II.K.
- The Director may notify the permittee at any time that the SWPPP, control measures, or other components of the facility's stormwater program do not meet one or more of the requirements of this permit. The notification shall identify specific provisions of the permit that are not being met, and may include required modifications to the stormwater program, additional monitoring requirements, and special reporting requirements. The permittee shall make any required changes to the SWPPP within 60 days of receipt of such notification, unless permission for a later date is granted in writing by the Director, and shall submit a written certification to the Director that the requested changes have been made.
- f. Maintaining an Updated SWPPP.
- (1) The permittee shall review and amend the SWPPP as appropriate whenever:
 - (a) There is construction or a change in design, operation, or maintenance at the facility that has a significant effect on the discharge, or the potential for the discharge, of pollutants from the facility;
 - (b) Routine inspections or compliance evaluations determine that there are deficiencies in the control measures including BMPs;
 - (c) Inspections by local, state, or federal officials determine that modifications to the SWPPP are necessary;
 - (d) There is a spill, leak or other release at the facility; or
 - (e) There is an unauthorized discharge from the facility.
 - (2) SWPPP modifications shall be made within 30 calendar days after discovery, observation or event requiring a SWPPP modification. Implementation of new or modified control

measures (distinct from regular preventive maintenance of existing control measures described in Part I.D.4.c) shall be initiated before the next storm event if possible, but no later than 60 days after discovery, or as otherwise provided or approved by the Director. The amount of time taken to modify a control measure or implement additional control measures shall be documented in the SWPPP.

- (3) If the SWPPP modification is based on a release or unauthorized discharge, include a description and date of the release, the circumstances leading to the release, actions taken in response to the release, and measures to prevent the recurrence of such releases. Unauthorized releases and discharges are subject to the reporting requirements of Part II.G of this permit.

5. Specific Benchmark Monitoring:

The permittee is required to monitor the facility stormwater discharges for the pollutants of concern listed in Table 1. Benchmark concentration values, as included in Table 1 of this permit, are not effluent limitations. Exceedance of a benchmark concentration does not constitute a violation of this permit and does not indicate that violation of a water quality standard has occurred; however, it does signal that modifications to the SWPPP are necessary, unless justification is provided in the comprehensive site compliance evaluation (Part I.D.4.d). In addition, exceedance of benchmark concentrations may indicate the requirement for more specific pollution prevention controls.

Table 1. Benchmark Monitoring Requirements	
Pollutants of Concern	Benchmark Concentration
Iron (total)	1.0 mg/L

6. Discharges To Waters Subject To TMDL Wasteload Allocations

a. Facilities in the Chesapeake Bay Watershed

Owners of facilities in the Chesapeake Bay watershed shall monitor their industrial stormwater discharges for total suspended solids (TSS), total nitrogen (TN), and total phosphorus (TP) to characterize the contributions from their facility's specific industrial sector for these parameters. Samples shall be collected during each of the first four monitoring periods (i.e., the first two years of permit coverage). Monitoring periods are specified in Part I.A.10 and Part I.A.12. Samples shall be collected and analyzed in accordance with Part I.A.10.a, d, and e and Part I.A.12.a, d, and e. Monitoring results shall be reported in accordance with Part I.C.6 and Part II.C, and retained in accordance with Part II.B.

b. Chesapeake Bay TMDL wasteload allocations and Chesapeake Bay TMDL action plans

- (1) EPA's Chesapeake Bay TMDL (December 29, 2010) includes wasteload allocations for VPDES permitted industrial stormwater facilities as part of the regulated stormwater aggregate load. EPA used data submitted by Virginia with the Phase I Chesapeake Bay TMDL Watershed Implementation Plan, including the number of industrial stormwater permits per county and the number of urban acres regulated by industrial stormwater permits, as part of their development of the aggregate load. Aggregate loads for industrial stormwater facilities were appropriate because actual facility loading data were not available to develop individual facility wasteload allocations.

Virginia estimated the loadings from industrial stormwater facilities using actual and estimated facility acreage information, and TP, TN, and TSS loading values from the Northern Virginia Planning District Commission (NVPDC) Guidebook for Screening Urban Nonpoint Pollution Management Strategies, prepared for the Metropolitan Washington Council of Governments. Annandale, VA. November, 1979. The loading values used were as follows:

TP - High (80%) imperviousness industrial; 1.5 lb/ac/yr

TN - High (80%) imperviousness industrial; 12.3 lb/ac/yr

TSS - High (80%) imperviousness industrial; 440 lb/ac/yr

The actual facility area information, and the TP, TN and TSS data collected for this permit will be used by DEQ to quantify the nutrient and sediment loads from VPDES permitted industrial stormwater facilities, and will be submitted to EPA to aid them in further refinements to their Chesapeake Bay TMDL model. The loading information will also be used by DEQ to determine any additional load reductions needed for industrial stormwater facilities for the next reissuance of this permit.

- (2) Data analysis and Chesapeake Bay TMDL action plans. The permittee shall analyze the nutrient and sediment data collected in accordance with subdivision 6.b(1) of this subsection to determine if additional action is needed for this permit term. The permittee shall average the data collected at the facility for each of the pollutants of concern (POC) (e.g., TP, TN and TSS) and compare the results to the loading values for TP, TN and TSS presented in subdivision 6.b(1) of this subsection. To calculate the facility loadings, the permittee shall use either the actual annual average rainfall data for the facility location (in inches/year) or the Virginia annual average rainfall of 44.3 inches/year.

The following formula or a site specific, DEQ-approved calculation shall be used to determine the loading value:

$$L = 0.226 \times R \times C \quad \text{Equation (1)}$$

where:

L = the Pollutant of Concern (POC) loading value (lb/acre/year)

C = the POC average concentration of all facility samples (mg/L)

0.226 = unit conversion factor

R = annual runoff (in/yr), calculated as: $R = P \times P_j \times R_v$

where:

P = annual rainfall (in/yr) [use the Virginia annual average of 44.3 in/yr, or site specific annual rainfall for your area of the State]

P_j = the fraction of annual events that produce runoff (usually 0.9)

R_v = the runoff coefficient, which can be expressed as: $R_v = 0.05 + (0.9 \times I_a)$

I_a = the impervious fraction [the ratio of facility impervious area to the total facility area]

or, $I_a = \text{AREAIMPERVIOUS} / \text{AREATOTAL}$

Substituting in Equation (1):

$$L = 0.226 \times P \times P_j \times (0.05 + (0.9 \times I_a)) \times C \quad \text{Equation (2)}$$

- (3) If the calculated facility loading value for TP, TN or TSS is less than the corresponding loading value presented in subdivision 6.b(1) of this subsection, then the calculations demonstrating that no reduction is necessary **shall be submitted within 90 days from the end of the second year's monitoring period**. The calculations shall include a site map with the total site area, the areas associated with industrial activity and the total impervious area.

If the calculated facility loading value for TP, TN or TSS exceeds the corresponding loading value presented in subdivision 6.b(1) of this subsection, then the permittee shall develop and submit a Chesapeake Bay TMDL Action Plan to DEQ for review and approval. The plan shall include a site map with the total site area, the areas associated with industrial activity and the total impervious area. The permittee shall implement the applicable elements of the approved plan over the remaining term of this permit and achieve all the necessary reductions by June 30, 2024. **The plan shall be submitted within 90 days from the end of the second year's monitoring period.** The action plan shall include:

- (a) A determination of the total pollutant load reductions for TP, TN and TSS (as appropriate) necessary to reduce the annual loads from industrial activities. This shall

be determined by calculating the difference between the loading values listed in subdivision 6.b(1) of this subsection, and the average of the sampling data for TP, TN or TSS (as appropriate) for the entire facility. The reduction applies to the total difference calculated for each pollutant of concern;

(b) The means and methods, such as management practices and retrofit programs, that will be utilized to meet the required reductions determined in subdivision 6.b(3)(a) of this subsection, and a schedule to achieve those reductions by June 30, 2024. The schedule should include annual benchmarks to demonstrate the ongoing progress in meeting those reductions;

(c) The permittee may consider utilization of any pollutant trading or offset program in accordance with §§ 62.1-44.19:20 through 62.1-44.19:23 of the Code of Virginia, governing trading and offsetting, to meet the required reductions.

(4) Permittees required to develop and implement a Chesapeake Bay TMDL Action Plan shall submit an annual report to the department by June 30th of each year describing the progress in meeting the required reductions.

7. Discharges Through A Regulated MS4 To Waters Subject To The Chesapeake Bay TMDL

In addition to the requirements of this permit, any facility with industrial activity discharges through a regulated MS4 that is notified by the MS4 operator that the locality has adopted ordinances to meet the Chesapeake Bay TMDL shall incorporate measures and controls into their SWPPP to comply with applicable local TMDL ordinance requirements.

8. Expansion Of Facilities That Discharge To Waters Subject To The Chesapeake Bay TMDL

Virginia's Phase I Chesapeake Bay TMDL Watershed Implementation Plan (November 29, 2010), states that the wasteloads from any expansion of an existing permitted facility discharging stormwater in the Chesapeake Bay watershed cannot exceed the nutrient and sediment loadings that were discharged from the expanded portion of the land prior to the land being developed for the expanded industrial activity.

a. For any industrial activity area expansions (i.e., construction activities, including clearing, grading and excavation activities) that commence on or after July 1, 2014 (the effective date of this permit), the permittee shall document in the SWPPP the information and calculations used to determine the nutrient and sediment loadings discharged from the expanded land area prior to the land being developed, and the measures and controls that were employed to meet the no net increase of stormwater nutrient and sediment loads as a result of the expansion of the industrial activity. Any land disturbance that is exempt from permitting under the VPDES construction stormwater general permit regulation (9VAC25-880) is exempt from this requirement.

b. The permittee may use the VSMP water quality design criteria to meet the requirements of subdivision a of this subsection. Under this criteria, the total phosphorus load shall not exceed the greater of:

(1) The total phosphorus load that was discharged from the expanded portion of the land prior to the land being developed for the industrial activity or

(2) 0.41 pounds per acre per year.

Compliance with the water quality design criteria may be determined utilizing the Virginia Runoff Reduction Method or another equivalent methodology approved by the board. Design specifications and pollutant removal efficiencies for specific BMPs can be found on the Virginia Stormwater BMP Clearinghouse website at <http://www.vwrrc.vt.edu/swc>.

c. The permittee may consider utilization of any pollutant trading or offset program in accordance with §§ 62.1-44.19:20 through 62.1-44.19:23 of the Code of Virginia, governing trading and offsetting, to meet the no net increase requirement.

E. §316(b) Phase II Conditions

1. Interim §316(b) Best Technology Available (BTA)

The permittee shall implement interim Best Technology Available (BTA) measures to minimize impingement and entrainment (I&E) mortality and adverse impacts. Each operating cooling water intake structure (CWIS) shall utilize a modified traveling screen, low-pressure screen wash system, and a fish return system in a manner that minimizes the impingement and entrainment (I&E) of aquatic species.

2. Impingement and Entrainment Control Technology Preventative Maintenance

The Operations and Maintenance (O&M) Manual for the permitted facility shall include a description of procedures and a regular schedule for preventative maintenance of all I&E control technologies and measures. In addition, the O&M Manual shall include a description of mitigation protocols and practices to implement should a water withdrawal event occur while an I&E technology or measure is off-line. The O&M Manual shall be updated to incorporate the information required by this condition by no later than 90 days following the effective date of this permit. All I&E control technologies and measures shall be maintained in effective operating condition. The permittee shall maintain documentation of maintenance and repairs of I&E control technologies and measures, including, but not limited to: the date(s) of regular maintenance, date(s) of discovery of areas in need of repair or replacement, date(s) for repairs, and date(s) the control technologies returned to full function.

3. Alternate Schedule for Submittal of 40 CFR §122.21(r) Information

The permittee shall, by no later than 270 days prior to the expiration date of this permit, submit to the DEQ Regional Office all applicable information described in 40CFR §122.21(r).

4. Monitoring Requirements

The permittee shall conduct visual inspections or employ remote monitoring devices during the period any cooling water intake structure is in operation. Inspections shall be conducted no less frequently than weekly to ensure that any technologies operated to comply with impingement mortality and entrainment requirements, any additional measures necessary to protect listed threatened and endangered species and designated critical habitat, and other standards for minimizing adverse environmental impact as established in this permit, are maintained and operated to function as designed.

Inspection documentation shall include at a minimum:

- a. Date, time, and location of the inspection or remote monitoring period;
- b. The name(s) and signature(s) of the inspector(s);
- c. A description of water withdrawal volumes or rates occurring at the time of the inspection;
- d. Where available, head loss across the intake screen(s);
- e. If adverse weather conditions exist, a description of the adverse weather conditions;
- f. Any technologies needing maintenance, repair, or replacement.

The requirement to conduct visual or remote inspections is waived when no water is withdrawn through all cooling water intake structures during an entire inspection period. For each cooling water intake structure, the permittee shall document the date(s) when no water is withdrawn through the respective intake structure.

When adverse weather conditions prevent visual inspections or remote monitoring from being safely conducted during a given inspection period, the visual inspection or remote monitoring requirements may be waived provided the permittee prepares documentation explaining the reasons why a visual inspection or remote monitoring could not be safely conducted. Adverse weather conditions are those that are dangerous or create inaccessibility for personnel, and may include such events as local flooding, high winds, electrical storms, or situations that otherwise make an inspection impracticable, such as drought or extended frozen conditions.

Any deficiencies found during a visual inspection or remote monitoring event shall be corrected as soon as possible, but no later than 30 days following discovery, unless permission for a later date is granted by DEQ in writing.

All documentation relating to visual inspections or remote monitoring, or the inability to safely conduct such monitoring due to adverse weather conditions, shall be signed and certified in accordance with Part II.K of this permit and shall be made available to DEQ personnel for review during facility inspections or no later than 30 days following receipt of a request by DEQ.

5. Annual Certification Statement Requirements

The permittee shall annually prepare a written statement certifying either: a) operations of any unit at the permitted facility that impacts cooling water withdrawals or operation of any cooling water intake structure have been substantially modified, or b) no substantial changes have occurred in the operations of any unit at the permitted facility that impacts cooling water withdrawals or operation of any cooling water intake structure.

If substantially modified operations have occurred, the permittee must provide with the annual certification statement a summary of those changes. In addition, the permittee must submit revisions to the information required at 40 CFR §122.21(r) with the next application for reissuance of this permit.

Certification statements shall be signed in accordance with Part II.K of this permit and submitted to the DEQ Piedmont Regional Office by no later than each February 10 for the period covering the preceding calendar year.

6. Measures to protect Federally-listed Threatened or Endangered (T&E) species, designated critical habitat, and fragile species or shellfish

The permittee shall operate each cooling water intake structure and cooling system in a manner designed to minimize incidental take, reduce or remove more than minor detrimental effects to Federally-listed threatened, endangered, or fragile species and designated critical habitat, including prey base.

The permittee shall prepare, on a calendar year basis, a report providing an assessment of the efficiency/effectiveness of the facility's control measures. The report shall include a compilation of all federally-listed threatened or endangered species found to have been impinged or entrained during the reporting year, including the total number and type of organisms (listed by taxa), and life stage cycle (egg, larva, juvenile, adult) impacted by injury or death. The assessments and compiled data shall be submitted to the DEQ-Regional Office by no later than each February 10 for the preceding calendar year.

7. Federal Endangered Species Act Compliance

Nothing in this permit authorizes take for the purposes of a facility's compliance with the Endangered Species Act.

PART II. CONDITIONS APPLICABLE TO ALL VPDES PERMITS

A. MONITORING

1. Samples and measurements required by this permit shall be taken at the permit designated or approved location and be representative of the monitored activity.
 - a. Monitoring shall be conducted according to procedures approved under Title 40 Code of Federal Regulations Part 136 or alternative methods approved by the U.S. Environmental Protection Agency, unless other procedures have been specified in this permit.
 - b. The permittee shall periodically calibrate and perform maintenance procedures on all monitoring and analytical instrumentation at intervals that will insure accuracy of measurements.
 - c. Samples taken shall be analyzed by a laboratory certified under 1VAC30-45, Certification for Noncommercial Environmental Laboratories, or 1VAC30-46, Accreditation for Commercial Environmental Laboratories.
2. Any pollutant specifically addressed by this permit that is sampled or measured at the permit designated or approved location more frequently than required by this permit shall meet the requirements in A 1 a through c above and the results of this monitoring shall be included in the calculations and reporting required by this permit.
3. Operational or process control samples or measurements shall not be taken at the designated permit sampling or measurement locations. Operational or process control samples or measurements do not need to follow procedures approved under Title 40 Code of Federal Regulations Part 136 or be analyzed in accordance with 1VAC30-45, Certification for Noncommercial Environmental Laboratories, or 1VAC30-46, Accreditation for Commercial Environmental Laboratories.

B. RECORDS

1. Records of monitoring information shall include:
 - a. The date, exact place, and time of sampling or measurements;
 - b. The individual(s) who performed the sampling or measurements;
 - c. The date(s) and time(s) analyses were performed;
 - d. The individual(s) who performed the analyses;
 - e. The analytical techniques or methods used; and
 - f. The results of such analyses.
2. Except for records of monitoring information required by this permit related to the permittee's sewage sludge use and disposal activities, which shall be retained for a period of at least five years, the permittee shall retain records of all monitoring information, including all calibration and maintenance records and all recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit, for a period of at least 3 years from the date of the sample, measurement, report or application. This period of retention shall be extended automatically during the course of any unresolved litigation regarding the regulated activity or regarding control standards applicable to the permittee, or as requested by the Board.

C. REPORTING MONITORING REQUIREMENTS

1. The permittee shall submit the results of the monitoring required by this permit by hard copy or by E-DMR not later than the 10th day of the month after the required monitoring period, unless another reporting schedule is specified elsewhere in this permit. Monitoring results sent by hard copy shall be submitted to:

DEQ - Piedmont Regional Office
4949-A Cox Road
Glen Allen, VA 23060

2. Monitoring results shall be reported on a Discharge Monitoring Report (DMR) or on forms provided, approved, or specified by the Department.
3. Calculations for all limits which require averaging of measurements shall utilize an arithmetic mean unless otherwise specified in this permit.

D. DUTY TO PROVIDE INFORMATION

The permittee shall furnish to the Department, within a reasonable time, any information which the Board may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit or to determine compliance with this permit. The Board may require the permittee to furnish, upon request, such plans, specifications, and other pertinent information as may be necessary to determine the effect of the wastes from his discharge on the quality of state waters, or such other information as may be necessary to accomplish the purposes of the State Water Control Law. The permittee shall also furnish to the Department upon request, copies of records required to be kept by this permit.

E. COMPLIANCE SCHEDULE REPORTS

Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit shall be submitted no later than 14 days following each schedule date.

F. UNAUTHORIZED DISCHARGES

Except in compliance with this permit, or another permit issued by the Board, it shall be unlawful for any person to:

1. Discharge into state waters sewage, industrial wastes, other wastes, or any noxious or deleterious substances; or
2. Otherwise alter the physical, chemical or biological properties of such state waters and make them detrimental to the public health, or to animal or aquatic life, or to the use of such waters for domestic or industrial consumption, or for recreation, or for other uses.

G. REPORTS OF UNAUTHORIZED DISCHARGES

Any permittee who discharges or causes or allows a discharge of sewage, industrial waste, other wastes or any noxious or deleterious substance into or upon state waters in violation of Part II F 1; or who discharges or causes or allows a discharge that may reasonably be expected to enter state waters in violation of Part II F 1, shall notify the Department of the discharge immediately upon discovery of the discharge, but in no case later than 24 hours after said discovery. A written report of the unauthorized discharge shall be submitted to the Department, within five days of discovery of the discharge. The written report shall contain:

1. A description of the nature and location of the discharge;
2. The cause of the discharge;
3. The date on which the discharge occurred;
4. The length of time that the discharge continued;
5. The volume of the discharge;
6. If the discharge is continuing, how long it is expected to continue;
7. If the discharge is continuing, what the expected total volume of the discharge will be; and
8. Any steps planned or taken to reduce, eliminate and prevent a recurrence of the present discharge or any future discharges not authorized by this permit. Discharges reportable to the Department under the immediate reporting requirements of other regulations are exempted from this requirement.

H. REPORTS OF UNUSUAL OR EXTRAORDINARY DISCHARGES

If any unusual or extraordinary discharge including a bypass or upset should occur from a treatment works and the discharge enters or could be expected to enter state waters, the permittee shall promptly notify, in no case later than 24 hours, the Department by telephone after the discovery of the discharge. This notification shall provide all available details of the incident, including any adverse affects on aquatic life and the known number of fish killed. The permittee shall reduce the report to writing and shall submit it to the Department within five days of discovery of the discharge in accordance with Part II I 2. Unusual and extraordinary discharges include but are not limited to any discharge resulting from:

1. Unusual spillage of materials resulting directly or indirectly from processing operations;
2. Breakdown of processing or accessory equipment;
3. Failure or taking out of service some or all of the treatment works; and
4. Flooding or other acts of nature.

I. REPORTS OF NONCOMPLIANCE

The permittee shall report any noncompliance which may adversely affect state waters or may endanger public health.

1. An oral report shall be provided within 24 hours from the time the permittee becomes aware of the circumstances. The following shall be included as information which shall be reported within 24 hours under this paragraph:
 - a. Any unanticipated bypass; and
 - b. Any upset which causes a discharge to surface waters.
2. A written report shall be submitted within 5 days and shall contain:
 - a. A description of the noncompliance and its cause;
 - b. The period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and
 - c. Steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.

The Board may waive the written report on a case-by-case basis for reports of noncompliance under Part II I. if the oral report has been received within 24 hours and no adverse impact on state waters has been reported.

3. The permittee shall report all instances of noncompliance not reported under Parts II I.1 or 2, in writing, at the time the next monitoring reports are submitted. The reports shall contain the information listed in Part II I.2.

NOTE: The immediate (within 24 hours) reports required in Parts II G, H and I shall be made to the Department's Regional Office at pro.SSO-UD@deq.virginia.gov or (804) 572-5020. For telephone reports outside normal working hours (before 8:30 am and after 5:00 pm Monday through Friday and anytime Saturday through Sunday), follow the instructions on the voicemail to reach the appropriate staff. For emergencies, the Virginia Department of Emergency Management maintains a 24 hour telephone service at 1-800-468-8892.

J. NOTICE OF PLANNED CHANGES

1. The permittee shall give notice to the Department as soon as possible of any planned physical alterations or additions to the permitted facility. Notice is required only when:
 - a. The permittee plans alteration or addition to any building, structure, facility, or installation from which there is or may be a discharge of pollutants, the construction of which commenced:

- (1) After promulgation of standards of performance under Section 306 of Clean Water Act which are applicable to such source; or
 - (2) After proposal of standards of performance in accordance with Section 306 of Clean Water Act which are applicable to such source, but only if the standards are promulgated in accordance with Section 306 within 120 days of their proposal;
 - b. The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants which are subject neither to effluent limitations nor to notification requirements specified elsewhere in this permit; or
 - c. The alteration or addition results in a significant change in the permittee's sludge use or disposal practices, and such alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use or disposal sites not reported during the permit application process or not reported pursuant to an approved land application plan.
2. The permittee shall give advance notice to the Department of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.

K. SIGNATORY REQUIREMENTS

1. Applications. All permit applications shall be signed as follows:
 - a. For a corporation: by a responsible corporate officer. For the purpose of this section, a responsible corporate officer means: (i) A president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy- or decision-making functions for the corporation, or (ii) the manager of one or more manufacturing, production, or operating facilities, provided the manager is authorized to make management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long term environmental compliance with environmental laws and regulation; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures;
 - b. For a partnership or sole proprietorship: by a general partner or the proprietor, respectively; or
 - c. For a municipality, state, federal, or other public agency: By either a principal executive officer or ranking elected official. For purposes of this section, a principal executive officer of a federal agency includes: (i) The chief executive officer of the agency, or (ii) a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency.
2. Reports, etc. All reports required by permits, and other information requested by the Board shall be signed by a person described in Part II K 1, or by a duly authorized representative of that person. A person is a duly authorized representative only if:
 - a. The authorization is made in writing by a person described in Part II K 1;
 - b. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity such as the position of plant manager, operator of a well or a well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company. (A duly authorized representative may thus be either a named individual or any individual occupying a named position.); and
 - c. The written authorization is submitted to the Department.

3. Changes to authorization. If an authorization under Part II K 2 is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of Part II K 2 shall be submitted to the Department prior to or together with any reports, or information to be signed by an authorized representative.
4. Certification. Any person signing a document under Parts II K 1 or 2 shall make the following certification:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

L. DUTY TO COMPLY

The permittee shall comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the State Water Control Law and the Clean Water Act, except that noncompliance with certain provisions of this permit may constitute a violation of the State Water Control Law but not the Clean Water Act. Permit noncompliance is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or denial of a permit renewal application.

The permittee shall comply with effluent standards or prohibitions established under Section 307(a) of the Clean Water Act for toxic pollutants and with standards for sewage sludge use or disposal established under Section 405(d) of the Clean Water Act within the time provided in the regulations that establish these standards or prohibitions or standards for sewage sludge use or disposal, even if this permit has not yet been modified to incorporate the requirement.

M. DUTY TO REAPPLY

If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee shall apply for and obtain a new permit. All permittees with a currently effective permit shall submit a new application at least 180 days before the expiration date of the existing permit, unless permission for a later date has been granted by the Board. The Board shall not grant permission for applications to be submitted later than the expiration date of the existing permit.

N. EFFECT OF A PERMIT

This permit does not convey any property rights in either real or personal property or any exclusive privileges, nor does it authorize any injury to private property or invasion of personal rights, or any infringement of federal, state or local law or regulations.

O. STATE LAW

Nothing in this permit shall be construed to preclude the institution of any legal action under, or relieve the permittee from any responsibilities, liabilities, or penalties established pursuant to any other state law or regulation or under authority preserved by Section 510 of the Clean Water Act. Except as provided in permit conditions on "bypassing" (Part II U), and "upset" (Part II V) nothing in this permit shall be construed to relieve the permittee from civil and criminal penalties for noncompliance.

P. OIL AND HAZARDOUS SUBSTANCE LIABILITY

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties to which the permittee is or may be subject under Sections 62.1-44.34:14 through 62.1-44.34:23 of the State Water Control Law.

Q. PROPER OPERATION AND MAINTENANCE

The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance also includes effective plant performance, adequate funding, adequate licensed operator staffing, and adequate laboratory and process controls, including appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems which are installed by the permittee only when the operation is necessary to achieve compliance with the conditions of this permit.

R. DISPOSAL OF SOLIDS OR SLUDGES

Solids, sludges or other pollutants removed in the course of treatment or management of pollutants shall be disposed of in a manner so as to prevent any pollutant from such materials from entering state waters.

S. DUTY TO MITIGATE

The permittee shall take all reasonable steps to minimize or prevent any discharge or sludge use or disposal in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment.

T. NEED TO HALT OR REDUCE ACTIVITY NOT A DEFENSE

It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

U. BYPASS

1. "Bypass" means the intentional diversion of waste streams from any portion of a treatment facility. The permittee may allow any bypass to occur which does not cause effluent limits to be exceeded, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions of Parts II U 2 and U 3.
2. Notice
 - a. Anticipated bypass. If the permittee knows in advance of the need for a bypass, prior notice shall be submitted, if possible at least ten days before the date of the bypass.
 - b. Unanticipated bypass. The permittee shall submit notice of an unanticipated bypass as required in Part II I.
3. Prohibition of bypass.
 - a. Bypass is prohibited, and the Board may take enforcement action against a permittee for bypass, unless:
 - (1) Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;
 - (2) There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and
 - (3) The permittee submitted notices as required under Part II U 2.
 - b. The Board may approve an anticipated bypass, after considering its adverse effects, if the Board determines that it will meet the three conditions listed above in Part II U 3 a.

V. UPSET

1. An upset constitutes an affirmative defense to an action brought for noncompliance with technology based permit effluent limits if the requirements of Part II V 2 are met. A determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is not a final administrative action subject to

- judicial review.
2. A permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:
 - a. An upset occurred and that the permittee can identify the cause(s) of the upset;
 - b. The permitted facility was at the time being properly operated; and
 - c. The permittee submitted notice of the upset as required in Part II I 2.
 - d. The permittee complied with any remedial measures required under Part II S.
 3. In any enforcement proceeding the permittee seeking to establish the occurrence of an upset has the burden of proof.

W. INSPECTION AND ENTRY

The permittee shall allow the Director, or an authorized representative, upon presentation of credentials and other documents as may be required by law, to:

1. Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit;
2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
3. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and
4. Sample or monitor at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by the Clean Water Act and the State Water Control Law, any substances or parameters at any location.

For purposes of this section, the time for inspection shall be deemed reasonable during regular business hours, and whenever the facility is discharging. Nothing contained herein shall make an inspection time unreasonable during an emergency.

X. PERMIT ACTIONS

Permits may be modified, revoked and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition.

Y. TRANSFER OF PERMITS

1. Permits are not transferable to any person except after notice to the Department. Except as provided in Part II Y 2, a permit may be transferred by the permittee to a new owner or operator only if the permit has been modified or revoked and reissued, or a minor modification made, to identify the new permittee and incorporate such other requirements as may be necessary under the State Water Control Law and the Clean Water Act.
2. As an alternative to transfers under Part II Y 1, this permit may be automatically transferred to a new permittee if:
 - a. The current permittee notifies the Department at least 30 days in advance of the proposed transfer of the title to the facility or property;
 - b. The notice includes a written agreement between the existing and new permittees containing a specific date for transfer of permit responsibility, coverage, and liability between them; and
 - c. The Board does not notify the existing permittee and the proposed new permittee of its intent to modify or revoke and reissue the permit. If this notice is not received, the transfer is effective on the date specified in the agreement mentioned in Part II Y 2 b.

Z. SEVERABILITY

The provisions of this permit are severable, and if any provision of this permit or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.